Botswana Family Health Survey 1984

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FAMILY HEALTH DIVISION
MINISTRY OF HEALTH

WESTINGHOUSE PUBLIC APPLIED SYSTEMS

This report presents the findings from the Botswana Family Health Survey which was implemented by the Family Health Division of the Botswana Ministry of Health. The survey is part of the worldwide Contraceptive Prevalence Survey (CPS) project designed to institutionalize the monitoring of levels of contraceptive awareness, availability and use in order to provide an improved data base for evaluating family planning programs.

Additional information on this survey or on family planning activities in Botswana can be obtained from the Family Health Division, Ministry of Health, P.O. Box 992, Gaborone, Botswana.

Questions concerning the international Contraceptive Prevalence Survey program should be addressed to: Contraceptive Prevalence Survey Project, Westinghouse Public Applied Systems, P.O. Box 866, Columbia, Maryland 21044, U.S.A. (Telex Number 87775).

FOREWORD

The Botswana Family Health Survey was conducted by the Ministry of Health, Government of Botswana, with technical guidance from Westinghouse Public Applied Systems of the United States of America. It forms one of a series of such surveys begun in 1977 which have been conducted in developing countries with the assistance of Westinghouse. Funding for the program of surveys has been provided by the United States Agency for International Development.

The survey was conducted at an opportune time. Our national family health and family planning programmes were reaching maturity, and there was a strong need to evaluate our progress. I was, therefore, glad to have the Ministry of Health through its Family Health Division and the Maternal and Child Health/Family Planning Unit collaborate with Westinghouse to implement this survey in Botswana.

I am now happy to see that the survey was a success. The Department of Primary Health Care's Family Health Division, the implementing agency for the survey for the Ministry of Health, must be commended for carrying out every phase of the survey efficiently, speedily and competently. I should also note that the survey organization benefited from a high degree of participation by relevant organizations. I thank the representatives of Westinghouse Health Systems who visited us from time to time and made valuable contributions to the survey success.

This report presents the findings of the survey based on preliminary analysis. A wealth of information on different aspects of family health, family planning knowledge and attitudes, contraceptive use and fertility is made available by this report. It is my hope that these data will serve the needs of those who are interested and those who have the responsibility of formulating, implementing and evaluating family health and family planning programmes. I also hope that subsequent indepth analysis of survey data will result in more detailed reports which will assist to strengthen our programmes.

Dr. D. B. Sebina
Permanent Secretary
Ministry of Health

ACKNOWLEDGEMENTS

I would like to express my sincere appreciation to the many people who assisted with this project. I would particularly like to thank the following:

- Dr. D. B. Sebina, the Permanent Secretary, Ministry of Health, for all his contribution and vital interest and support.

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- Dr. E. T. Maganu, the Assistant Director of Health Services/ Primary Health Care, for taking over the responsibility of the project and for his tireless support and help.

- Mrs. M. K. Larson, Senior MCH/FP Officer and Survey Technical Director, for her administrative assistance and initiative from the planning stages of the survey through the analysis and preparation of this report.

- Special thanks go to Mr. F. Zufferey, the Survey Field Coordinator, whose endless hours of work ensured high quality results and without whom the survey would have been nearly impossible to implement. We are most grateful also to all the survey field workers and drivers.

- Mr. D. Nordstrom who provided a vital link in data processing and who, with Ms. L. Mosarwa and the other central office staff, edited and coded the questionnaires.

- Mr. Raymond Maseko for tirelessly devoting his time after hours in order that data processing deadlines could be met.

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- Mrs. S. S. Kupe, Nursing Education, University of Botswana, who with Mrs. Larson proposed this survey, following their participation in the Regional Conference on Contraceptive Prevalence and Family Health Surveys in Africa and the Middle East in Harare, Zimbabwe in March, 1983.

- Mr. O. T. Mapitse, Attorney General's Chambers, for his professional assistance during contract negotiations.

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- All Ministries and organizations that contributed towards the success of the survey. In particular, I am grateful to the support personnel in the Ministry of Health for their daily help, the Central Transport Organization for their dedicated assistance despite heavy demand, and the Central Statistics Office and Computer Bureau of the Ministry of Finance and Development Planning for their continuous support from the planning phase to the end of the study.

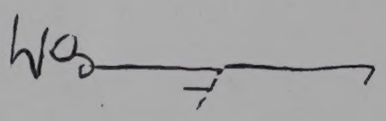
- I would like to give special thanks to the Ministry of Local Government and Lands, Chiefs and local authorities for their assistance in locating sample households and enhancing local receptivity and understanding of the survey. I also would like to thank the Surveys and Lands Department for providing the maps used during the survey.

- The Gaborone Bridec for providing office accommodation for survey staff when there was a great office space shortage.

- USAID Botswana staff especially Ms. L. Taylor, and the Westinghouse staff, in particular, Dr. A. Way, Ms. J. Cushing and Dr. A. Aliaga, to whom we owe an enormous debt of gratitude.

- Most importantly we express our deep appreciation to all the respondents of this survey for their willing cooperation and patience in responding to a long and personal interview in the midst of their busy schedules.

- Many others contributed generously to making this study possible. Though they remain unnamed, their help is profoundly appreciated.



W. G. Manyeneng
Project Director

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RESUME AND RECOMMENDATIONS

The Botswana Family Health Survey (BFHS) was initiated by the Family Health Division of the Ministry of Health (MOH) in 1983 on the tenth anniversary of the establishment of the national Maternal and Child Health and Family Planning (MCH/FP) programme. The main purpose of the survey was to collect basic health and family planning data needed for evaluating MCH/FP activities in Botswana. To achieve this objective, a representative national sample of 3,064 women in the reproductive ages (15-49) was interviewed during the BFHS fieldwork which was carried out between March and July, 1984. The following is a brief resume of the major findings and recommendations from this survey.

RESUME

The BFHS found that fertility levels in the past have been high in Botswana and that, although the pace of childbearing has slowed somewhat recently, current fertility levels and expectations remain quite high.

- The average woman in the 45-49 age group who is nearing the end of her childbearing years has had almost seven live births.
- The current total fertility rate indicates that the average woman, beginning her reproductive period at this time, will have more than six births before she reaches her 50th birthday.
- Family size expectations are slightly lower than current fertility levels, with the average woman indicating that she wants to have 5.6 children by the end of her childbearing years.

Despite the high fertility levels, there is evidence of a desire on the part of many women to control their fertility (i.e., to limit their family size or to space their next pregnancy). Moreover, many women appear to be concerned about the effect that rapid population growth has had on the size of Botswana's population.

- Around one out of every three currently in union women does not want another child, and about one out of every two of these women did not want another child at the time of her last pregnancy.

- The majority of women wanting additional children (34 percent of all currently in union women) express a desire to delay the next pregnancy for at least one year.

- The average woman's interest appears to turn from a focus on spacing births toward a desire to limit the size of her family after her 30th birthday and/or when she has four children.

- Slightly more than one out of every two women thinks that Botswana already has too many people.

Traditionally breastfeeding and postpartum abstinence have been among the most important variables influencing birth intervals and, thus, fertility levels in Botswana. The BFHS results document the continuing near universality of these practices.

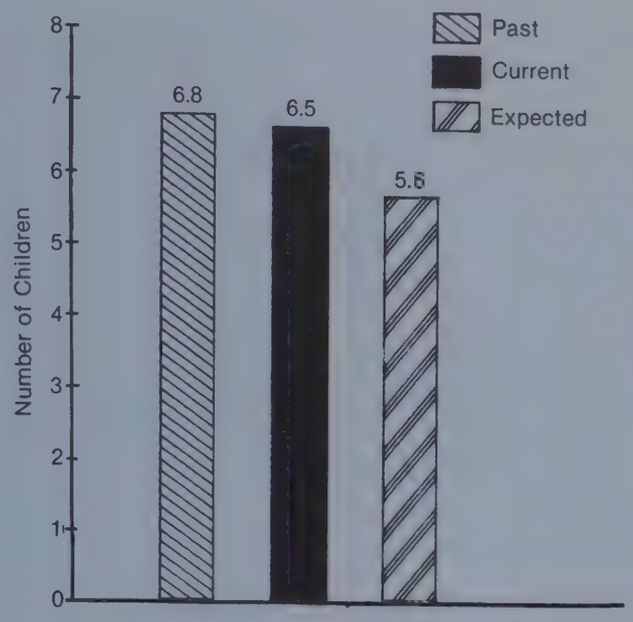
- Almost all women (98 percent) with a recent birth report that they breastfed their babies.

- The national median duration of breastfeeding is 19 months, and the average duration of breastfeeding among urban mothers (18 months) is only somewhat shorter than that among rural mothers (20 months).

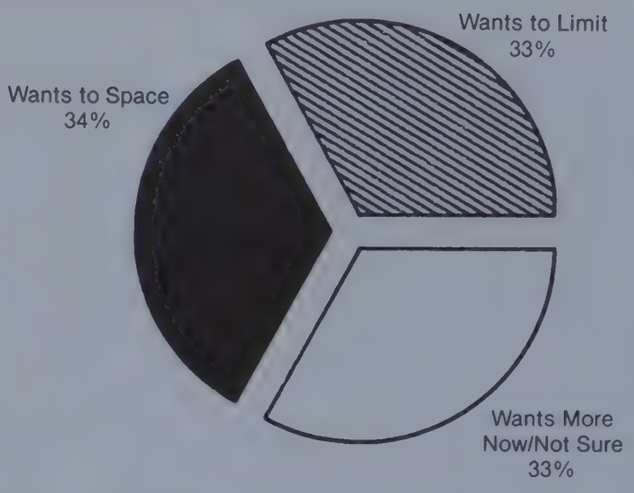
- Almost one out of every two mothers (44 percent) with a recent birth has not yet resumed sexual relations with her partner.

- The average woman does not resume sexual relations with her partner for a year after the birth of a child; the average period in which abstinence is practiced is longer among rural (12 months) than urban (6 months) mothers.

If the prevalence and duration of breastfeeding and postpartum abstinence decline as is likely as development accelerates in Botswana, the use of modern contraceptive methods will become increasingly important in enabling women to achieve their desired birth intervals.



FERTILITY LEVELS AND EXPECTATIONS
(ALL WOMEN)



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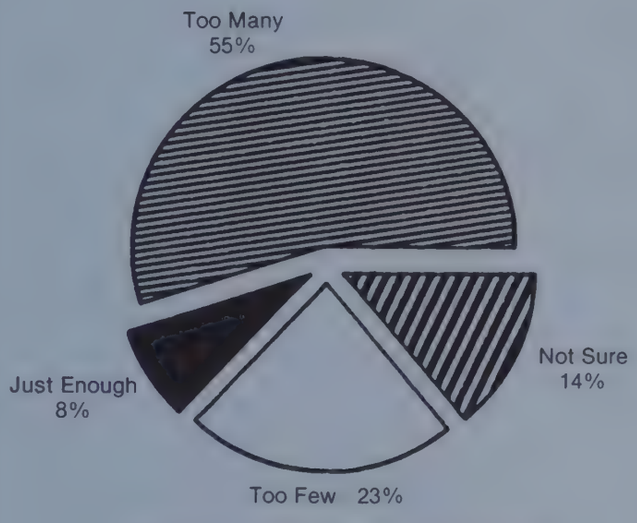

ATTITUDE ABOUT BOTSWANA'S
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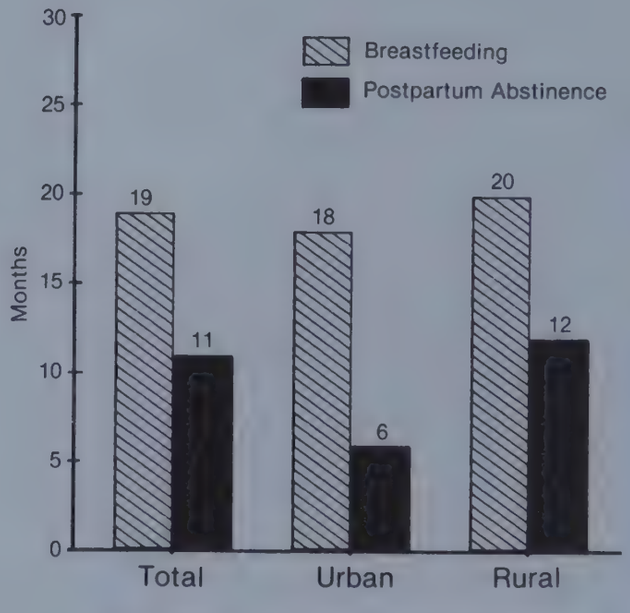


ESTIMATED MEDIAN DURATIONS
OF BREASTFEEDING
AND POSTPARTUM ABSTINENCE

The BFHS found that the MCH/FP programme has been quite successful to date in educating women about family planning. The impact of these educational efforts is evidenced in the fact that contraceptive knowledge and approval are widespread in Botswana.

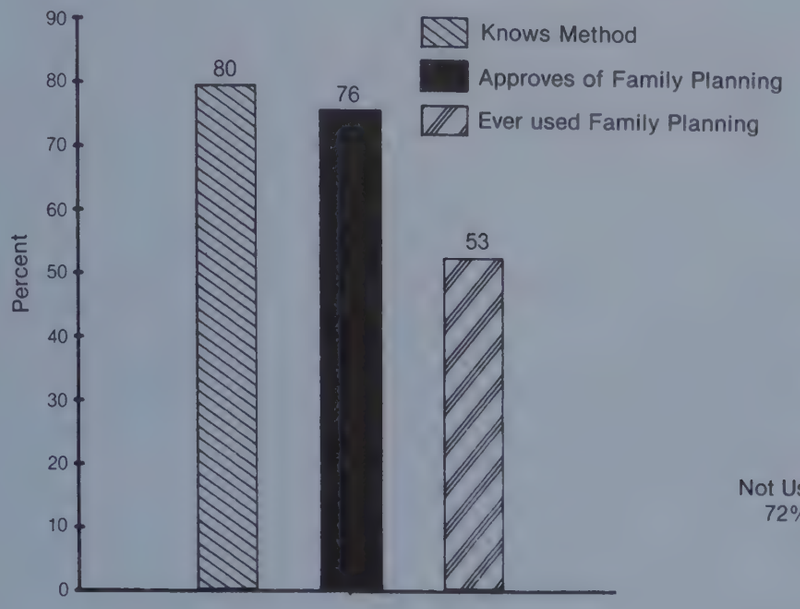
- Eight out of every ten ever in union women knows at least one modern family planning method.
- The average woman is familiar with four methods.
- Almost all women (95 percent) who know about family planning methods approve of their use.

Many women have, in fact, used family planning to avoid or delay a pregnancy. Moreover, a significant proportion are presently practicing family planning.

- Around one out of every two ever in union women has ever used at least one family planning method, and around one out of every three ever in union women has used a modern method.
- Among currently in union women, 28 percent are presently practicing family planning.
- Two-thirds of all current users——19 percent of all currently in union women——are using modern methods, principally the pill and the IUD.
- Almost one-third of all users——9 percent of currently in union women——are relying on abstinence.

The BFHS found evidence of a strong interest in family planning among women who were not using family planning at the time of the survey and a considerable unmet need for family planning.

- Nine out of ten currently in union women who know about family planning but are not currently using a method indicate that they would like more information about family planning.



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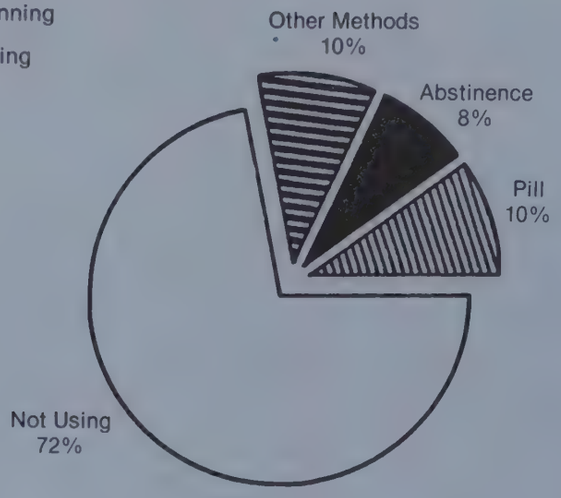
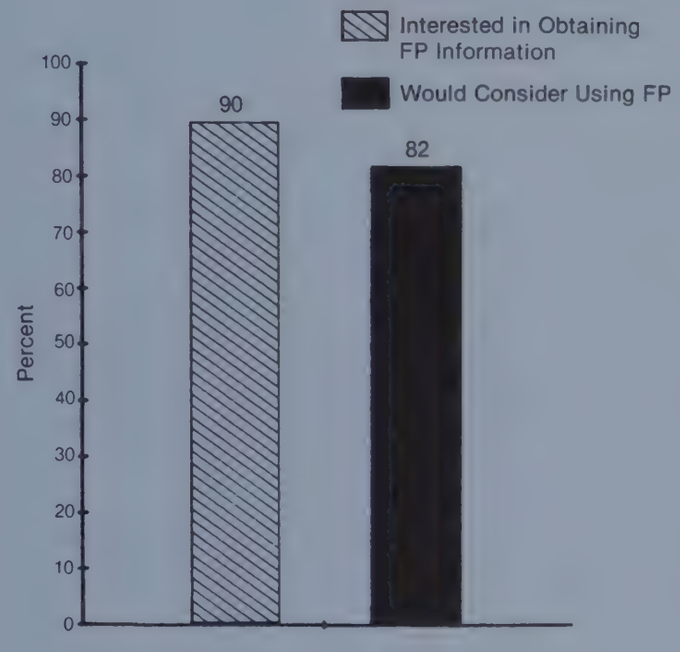
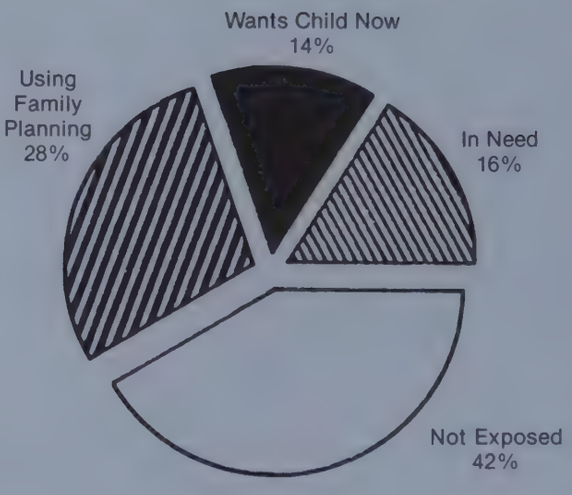


CURRENT USE OF FAMILY PLANNING BY METHOD (CURRENTLY IN UNION WOMEN)



NONUSER ATTITUDES TOWARD FAMILY PLANNING



UNMET NEED FOR FAMILY PLANNING (CURRENTLY IN UNION WOMEN)

- Eight out of every ten of these nonusers say that they would consider using family planning in the future.

- About one out of every six currently in union women is in immediate need of family planning services, i.e., she is exposed to the risk of pregnancy and not using family planning and has expressed a desire to limit or space births.

The availability of contraceptive services is an important precondition to use. The BFHS results suggest that most women are aware of a place where they can obtain contraceptive services and that family planning services are readily accessible to most women in Botswana.

- Seven out of every ten ever in union women know a source where they can obtain contraceptive services.

- Government health facilities are the major family planning service provider; almost all current users (95 percent) obtain their method from an MOH facility.

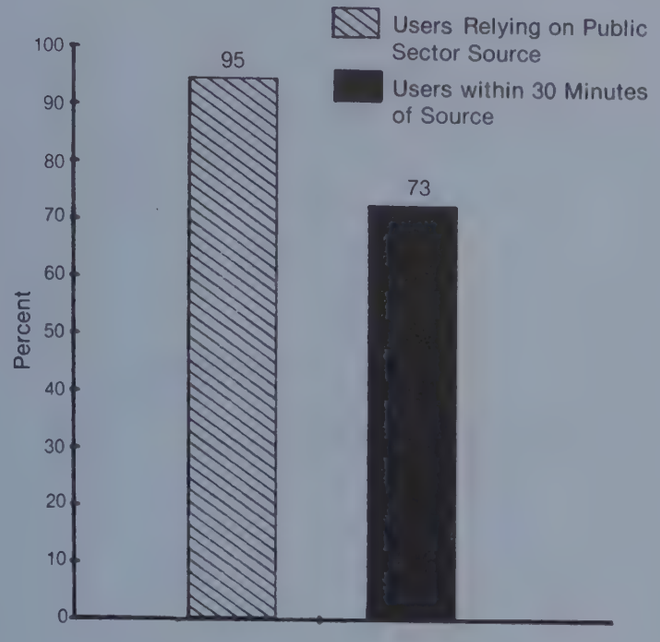
- Services are generally readily accessible; seven out of ten users report that it takes 30 minutes or less to walk to their service provider.

The BFHS also found that other MCH/FP services are widely used by women in Botswana.

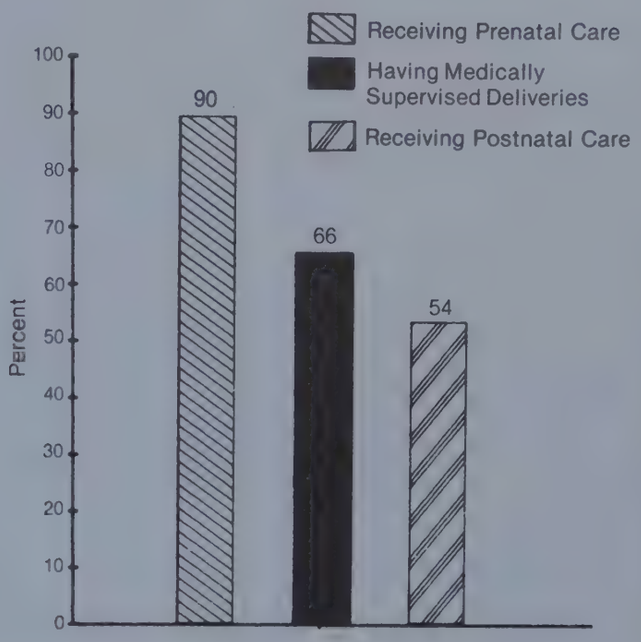
- Ninety percent of women with a recent birth received prenatal care at a health facility, and one out of every ten of these mothers was visited in her home during her pregnancy by a health worker providing prenatal education.

- Two-thirds of mothers with a recent birth had delivered her baby at a health facility under the supervision of a doctor or nurse/midwife.

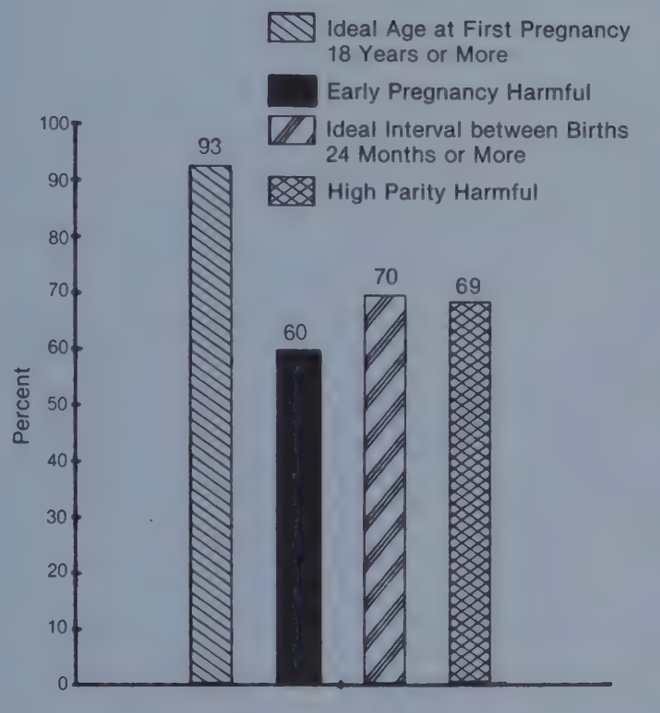
- Around one out of two mothers reported having had a postpartum medical examination, and one out of every four mothers was visited at home by a health worker during the week following delivery.



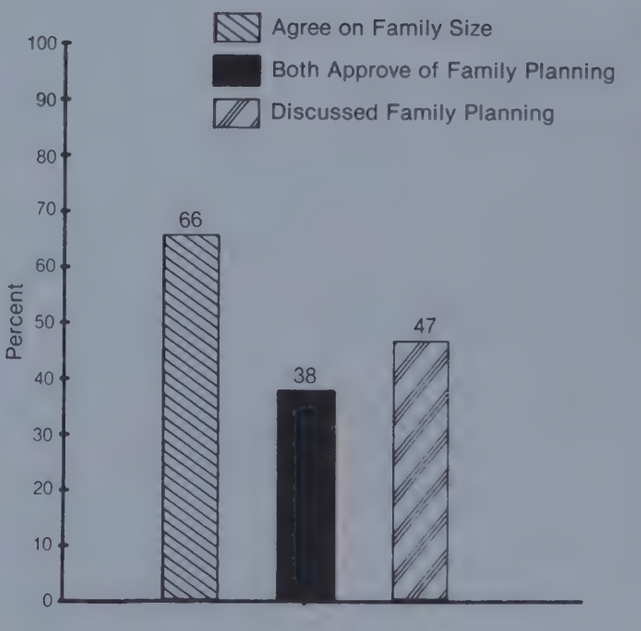
AVAILABILITY OF FAMILY PLANNING SERVICES



UTILIZATION OF MCH SERVICES



REPRODUCTIVE HEALTH ATTITUDES (ALL WOMEN)



COMPARISON OF FERTILITY AND FAMILY PLANNING ATTITUDES OF WOMAN AND HER PARTNER

Attention has been focused on the problem of teenage pregnancies in Botswana. The BFHS found that most women are concerned about the health risks associated with teenage pregnancies and that the average woman feels that a girl should not become pregnant before her 20th birthday. However, actual behavior differs substantially from this ideal.

- Six out of every ten women believe that teenage pregnancies may be harmful to a young woman's health.
- Nine out of ten women think that a woman should be at least 18 years old before she has her first child, and one out of five women feels that she should be at least 22 years old before she has her first child.
- Three out of every five women were younger at the time they first became pregnant than they consider ideal.
- Many women were still teenagers when they became pregnant for the first time, and around one out of every four ever pregnant women had her first pregnancy before her 18th birthday.

The BFHS also examined women's attitudes concerning other key reproductive health issues, particularly with regard to the spacing of pregnancies. The results show that the customary tradition of spacing births remains quite strong in Botswana. Moreover, despite their generally high fertility expectations, women appear to be becoming aware of the health risks associated with high parity.

- Seven out of every ten women believe the interval between births should be at least 24 months, and the mean ideal interval is 40 months.
- Women seem to be achieving the birth intervals they desire; the mean interval between the last two births for women with two or more births is 43 months.
- Seven out of ten women think that having many children may be harmful for a woman's health.

Finally, the BFHS also looked at the issue of women's perceptions about male attitudes toward fertility and family planning. Women generally believe men are somewhat more likely than they themselves are to want more children. Men are also seen as less likely to approve of family planning. Communication between men and women concerning family planning also is not frequent.

- One out of every three women who does not want another child says that her partner does want more children.
- Approval of family planning is nearly universal among women, but one out of every five women says that her partner disapproves of family planning.
- Only one out of every two couples has talked about family planning in the past year, and only one in five couples has had more than one or two conversations about family planning.

RECOMMENDATIONS

The BFHS results document the considerable impact the Botswana MCH/FP programme has had in providing health and contraceptive services to women in childbearing ages. Contraceptive knowledge and approval are widespread, and MCH/FP services are generally perceived as convenient and accessible by women. However, the survey findings also point to the need to improve and expand services as the MCH/FP programme continues into its second decade of activity.

Among the most important areas where additional efforts are needed is the programme's IE&C (Information, Education and Communication) component. Specifically it is recommended that:

- Further efforts should be directed toward educating and counseling teenagers (both boys and girls) about responsible sexual behavior.

- Additional attention should be placed on informing men about the health and other benefits of family planning. Emphasis should be placed on the importance of couple communication in this area and on the fact that childbearing is the joint responsibility of the couple and not the choice of the man or woman alone.

- Stress should continue to be placed on the health benefits for the family of traditional practices such as breastfeeding and postpartum abstinence.

- IE&C materials targeting special population subgroups, e.g., illiterate women, should be developed.

In the area of service delivery, the BFHS results also indicate that additional efforts are needed. It is suggested that:

- Emphasis should be placed on identifying women in need of family planning services, particularly those concerned about limiting their family size. Counseling about family planning during the provision of prenatal and postpartum services is a key mechanism in reaching these women.

- Potential acceptors should be counseled about the most appropriate methods for their age, life situation and fertility intentions.

- Acceptors should be informed about possible side effects associated with the method they adopt, and follow-up of acceptors should be emphasized to reduce the levels of discontinuation due to side effects.

The BFHS finding that fertility levels continue to be very high in Botswana, coupled with the census results which indicate that the population may be expected to double in the next 20 years, indicates the need for greater attention to be paid to implications of population growth for Botswana's development over the next two decades. To focus concern on these issues, it is recommended that:

- A population committee should be formed to discuss population related issues and to make suggestions regarding appropriate policies in this area.

The BFHS also shows the need for further research efforts in the area of reproductive health and family planning. In this regard, it is suggested that:

- A study should be conducted on male attitudes and behavior in the area of fertility and family planning.
- Research should be undertaken to investigate further the determinants and consequences of adolescent childbearing.

Finally, it is recommended that the BFHS should be repeated in 1988 to monitor trends in the health and family planning indicators for which data was collected in the present survey.

Chapter 1
INTRODUCTION

The Republic of Botswana is one of the most sparsely populated countries on the African continent. Although the total land area of Botswana is 582,000 km^2, only about three percent of this area is suitable for cultivation, the rest being semi-desert. As a result, the vast majority of Botswana's population is settled in the eastern part of the country which has better rains and fertile soils.

Although Botswana is sparsely populated, it has a rapid rate of population growth. Current estimates place the annual rate of Botswana population growth at 3.4 percent, a rate that if maintained will result in the population doubling over the next 20 years. In the Botswana context of scarce resources, the issues of the country's population size and its rate of growth take on truly national importance.

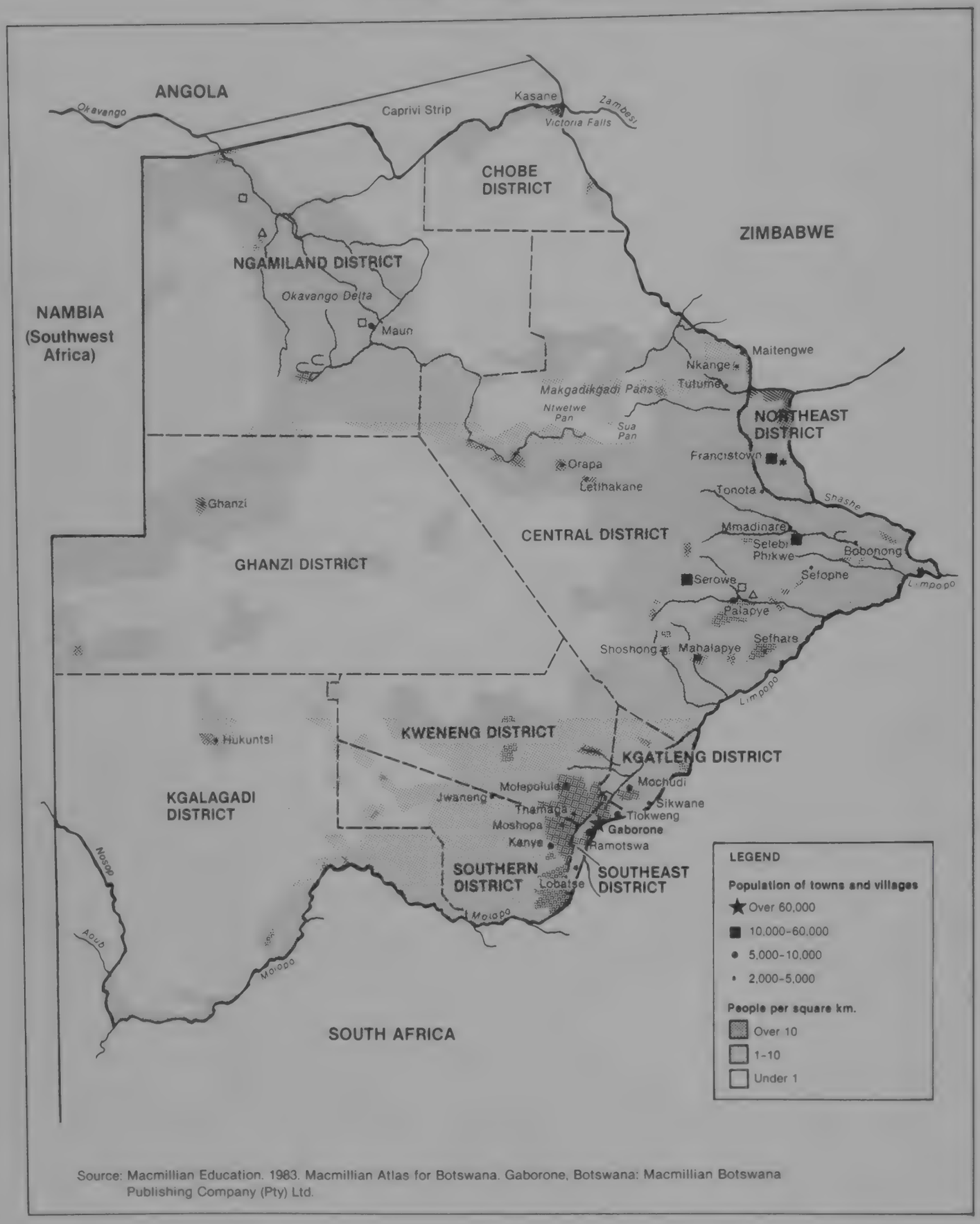
1.1 GEOGRAPHY, HISTORY AND THE ECONOMY

1.1.1 Geography

In size, Botswana is similar to France, Kenya or the State of Texas. It lies at the heart of the Southern Africa plateau at a mean altitude of 1,000 meters above sea level. Botswana is bordered by the Republic of South Africa on the south, Namibia on the west, Zimbabwe on the northeast and the Caprivi Strip and Zambia on the north (Figure 1.1).

About 75 percent of Botswana lies within the tropical zone. The climate is semi-arid. Temperatures are very high in summer but can be quite low during winter nights, often below zero. Rainfall is highly erratic and seasonal, coming primarily between October and April. The distribution of rainfall is uneven both in time and space.

Figure 1.1
MAP OF BOTSWANA



Source: Macmillian Education. 1983. Macmillian Atlas for Botswana. Gaborone, Botswana: Macmillian Botswana Publishing Company (Pty) Ltd.

Most of Botswana has a subdued relief. Hills are low and rather scattered throughout the country except in the east where they are more clustered. The drainage in the eastern part of the country orients towards the Limpopo river. In the south, a number of inactive river valleys orient towards the Molopo. In the northeast, the Nata and its tributaries empty their water into Sua Pan. In the west of the country, the relief undulates gently and is monotonous. The northwestern part of the country is dominated by the Okavanga delta with its lagoons and network of water channels, swamps and islands. The Chobe-Zambezi drainage system to the extreme north of the country is associated with another swampy zone.

1.1.2 History

The history of Botswana dates back as far as before and shortly after the beginning of the Christian Era when the first of many ethnic groups settled the land which forms the present Botswana. The San and Khoe, who are believed to be the earliest settlers, were living in Botswana around 3000 BC. Bantu-speaking farmers are believed to have moved into the area around 1500 BC. Continuing movements of population into Botswana occurred throughout the following centuries.

The population in Botswana had no permanent contact with Europeans until the first missions were established in the country in the early 1800s. The following decades were years of white exploration, mineral discovery and economic change. A protectorate was established by the British in 1885 after a period of hostilities between the Batswana and the Boers. Following more than eighty years of British rule, the British Bechuanaland Protectorate became the independent Republic of Botswana in 1966.

1.1.3 The Economy

Like all developing countries, Botswana's economy depends mainly on a few primary products. Table 1.1 gives an overview of the country's economy. The table shows that the Gross Domestic Product (GDP) was estimated to be 796.5 million Pula(P) at current prices in 1980/81. The average rate of growth in the GDP at constant prices from 1973/4 to 1980/81 was 10 percent. Large increases in the mineral production were the main reason for this high growth rate.

TABLE 1.1

TOTAL GDP AT CURRENT MARKET PRICES AND VALUE ADDED BY SECTOR AND YEAR

Sector	Year		
	1973/74	1979/80	1980/81
GDP at Current Market Prices (in millions)	P184.9	P689.4	P796.5
Value Added By Sector (in percent)			
TOTAL	100.0	100.0	100.0
Agriculture	33.7	10.9	12.2
Mining	8.7	31.6	25.9
Manufacturing	5.5	4.2	6.0
Electricity and Water	1.8	2.2	2.4
Construction	10.9	5.3	5.2
Trading, Hotels, Restaurants	15.1	22.8	23.9
Transport	4.1	2.0	2.0
Bank, Insurance, Business Services	7.2	10.2	8.8
General Government	9.8	11.8	14.3
Social and Personal Services	3.7	3.0	3.4
Dummy Sector	-0.4	-4.0	-4.0

SOURCE: Central Statistics Office, 1982a, p.25.

The dominant sector in the economy is mining, which contributed 26 percent of the GDP in 1980/81. Diamonds and copper-nickel are the main minerals mined. Manufacturing is another important contributor to the economy, accounting for 23 percent of the GDP (including the revenue collected from the Customs Union). The relative economic importance of agriculture has decreased in recent years as the modern sector has grown substantially.

1.2 DEMOGRAPHIC SITUATION

1.2.1 Sources of Demographic Data

Nine censuses have been conducted in Botswana between 1904 and 1981. The 1964, 1971 and 1981 censuses are considered the most reliable because they were based on house-to-house canvasses of the population rather than on the group enumeration procedures used in the six earlier censuses.

Botswana also has a civil registration system. Under the system, registration is compulsory in four towns (Gaborone, Francistown, Lobatse, and Selibe-Phikwe) and seven villages (Serowe, Mahalapye, Molepolole, Kanye, Mochudi, Maun and Kasane). Outside of these areas, which included 28 percent of the country's population in 1981, registration is voluntary (Country Statement, 1984, p.1).

Other sources of demographic data include household surveys, particularly the 1975 Rural Income Distribution Survey and the 1978 National Migration Study. The recently established Continuous Household Integrated Programme of Surveys (CHIPS) is expected to be a rich source of population information in the future. Finally, many government agencies generate population-related data as part of their administrative record-keeping which are collated and published, primarily by the Central Statistics Office (Country Statement, 1984, p.1).

1.2.2 Population Size and Growth

According to the latest census, a total of 941,027 people were living in Botswana in 1981. Table 1.2 summarizes selected population indicators from the census. The crude birth rate at the time of the census was 47.2 births per 1,000 population while the crude death rate was 13.0 deaths per 1,000 population. The natural increase implied by those rates was 3.4 percent per year.

TABLE 1.2

SELECTED POPULATION INDICATORS BASED ON THE 1981 CENSUS IN BOTSWANA

Indicator	
Enumerated Population	
Total	941,027
Males	443,104
Females	497,923
Population Density (per sq. km)	1.6
Proportion Urban (%)	17.7
Dependency Ratio (per 1000)	109.8
Child-Woman Ratio (per 1000)	819.0
Crude Birth Rate	47.2
Crude Death Rate	13.0
Rate of Natural Increase	3.4
General Fertility Rate (per 1000 women 15-49)	210.0

SOURCE: Central Statistics Office, 1984, p.3.

1.2.3 Population Settlement Patterns

The availability of water is the dominant factor influencing settlement patterns in Botswana. About 87 percent of the population

lives in the eastern part of country where there are better rains and where the soils are fertile enough to allow arable farming to take place. Besides water, the availability of mineral deposits also influences population settlements. This has been particularly the case with new towns such as Selibe-Pikwe, Orapa and Jwaneng, which were established in mining areas.

The following are the main features of the current settlement pattern:

- There is a heavy concentration of population in the east where arable land and water are more available and the infrastructure is more developed.
- A significant portion of the population is living in urban areas and villages larger than 10,000 (32 percent).
- Although a steady urbanization process is ongoing, the majority of the population is still living in the rural areas, in very small villages and in the lands and cattleposts areas.
- Gaborone's growth overshadows that of all the other settlements.

1.2.4 Urbanization

Historically, the population in Botswana has been largely rural, influenced by the primary economic activities, i.e., cattle rearing and arable farming. Over the years economic opportunities outside the agriculture have increased and the population has become more urbanized. Census data document the trend of increasing urbanization that is taking place in Botswana. A comparison of the 1971 and 1981 census results indicate that urban areas[1] have grown in population during the ten-year period by more than 70 percent, raising their share of the country's total population from 10 percent to 18 percent (Central Statistics Office, 1984, p.3).

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[1] Urban areas by census definition include settlements of more than 5,000 inhabitants in which 75 percent of the labour force is involved in non-agricultural employment.

1.3 MCH/FP PROGRAMME IN BOTSWANA

1.3.1 History of the Programme

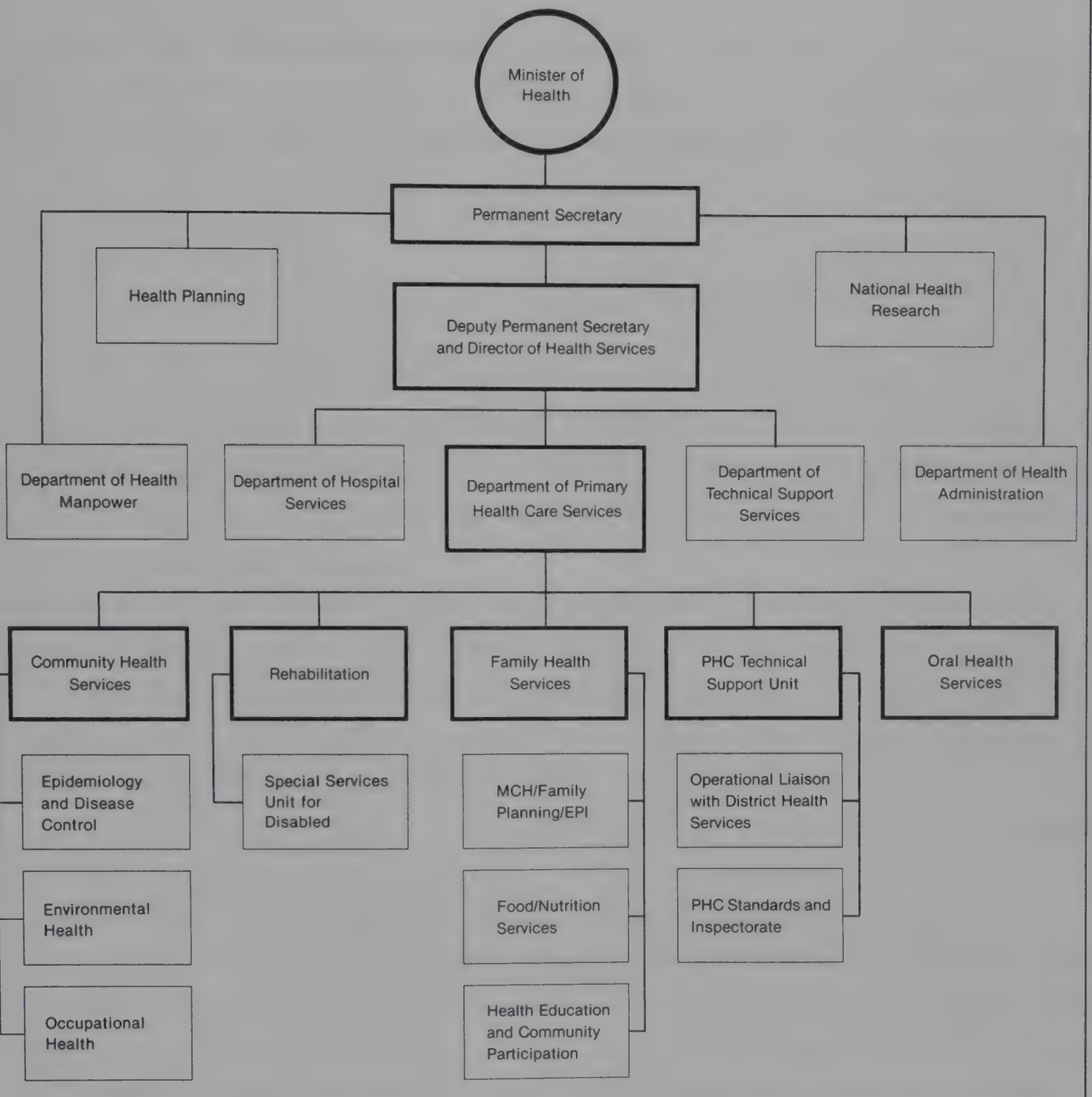
When Botswana became independent in 1966, the Ministry of Health inherited a largely curative, urban health care system. Since then, Botswana has adopted a Primary Health Care strategy as the means for achieving healt for all. Gradually, services have altered to reflect this approach with an emphasis on prevention of disease and promotion of health.

Preventive maternal and child health/family planning (MCH/FP) services in Botswana originated when, in 1967, several women in Francistown asked the Government Surgeon for contraceptives (Cook, 1973, p. 3-7). These supplies were obtained from the International Planned Parenthood Association (IPPF) which subsequently began a pilot project in 1969 to introduce family planning in Serowe, a large village in the Central District. Six middle-aged women with children were trained as volunteer family welfare educators by an IPPF visiting team. In addition to human reproduction and family planning, the training included other subjects such as immunizations, breastfeeding, balanced feeding and communication skills. Thus, from the beginning, family planning in Botswana has been integrated into the general context of maternal and child health and has never been a separate vertical programme.

In 1973, a Maternal and Child Health/Family Planning (MCH/FP) Unit was was formed in the Ministry of Health, and a national programme was established. The shaping of this programme and the establishment of the unit's broad lines of activity came about under the able leadership of Dr. N. N. Mashalaba, who retired from Government service in 1983 after heading the unit for ten years.

As a key component of the MCH/FP programme, it was decided to train 60 family welfare educators each year about nutrition, child and maternal

Figure 1.2
ORGANIZATION OF THE DEPARTMENT OF PRIMARY HEALTH CARE SERVICES



Source: Ministry of Health, 1985b.

care, environmental sanitation and prevention of some major diseases. Since 1973, more than 600 family welfare educators have successfully been trained by the MCH/FP Unit (MCH/FP Unit, 1985). Their role in the communities which select them is largely educational and motivational.

In 1979, the Maternal and Child Health/Family Planning Unit joined with the Nutrition Unit and Health Education Unit to form the Family Health Division in the Department of Primary Health Care Services (Figure 1.2).

1.3.2 Current MCH/FP Programme

The main objectives of the Maternal and Child Health/Family Planning Unit (MCH/FP) are to reduce sickness and death among mothers, children and infants, and to promote reproductive health as well as the physical and psychological health and development of children and adolescents.

In order to achieve these objectives, health workers provide antenatal care, supervise deliveries in health facilities, provide postnatal care and family planning services, vaccinate against infectious diseases, monitor the growth and development of children by periodic weighing and examination, supervise children's health in schools and encourage the community to participate in the health care of families.

These MCH/FP services are available at all health facilities which also provide curative, preventive and promotive care for the family. Since 1973, these service points have increased dramatically from 50 to more than 375 permanent facilities (Cook, 1973, p.6). Emphasis has been placed on ensuring preventive care close to the predominantly rural population rather than on developing large, urban curative units.

Considerable strides have also been made in reaching the population in need of these MCH/FP services, and many targets set in the 1979-1985

National Development Plan have already been exceeded (Table 1.3). Participation is fostered through health education carried on by home visits, school health education, village meetings, volunteer efforts and mass media.

TABLE 1.3

MCH/FP SERVICE TARGETS AND COVERAGE

MCH/FP Service	1985 Target[a]	Achieved Coverage
Pregnant women attending antenatal clinic at least once	85%	90%[b]
Deliveries supervised by trained workers	70%	67%[b]
Women of reproductive age using family planning (modern methods)	15%	19%[b]
Immunization		
DPT (3 doses)	80%	82%[c]
Polio (3 doses)	80%	77%[c]
Measles	60%	75%[c]
BCG Vaccination	85%	94%[c]

SOURCES: [a] See Ministry of Finance, 1980, p.275.
[b] See Table 6.5, 6.6 and 8.2 in this report.
[c] See Ministry of Health and World Health Organization, 1983, p.64.

Family planning activities have been integrated into MCH services since the beginning of the national programme in 1973 because of their benefits to the health and welfare of families. The policy of the Government of Botswana affirms that these services be available to every family:

> It is the basic right of every family to determine for itself how many children to have and when to have them. If couples are to exercise the choice of determining the number and spacing of their children, then Public Health Agencies must provide them with the services, supplies and information on how to plan families (Ministry of Health, 1976, p.i).

Until recently, however, family planning services were offered at only specified times during the week, as were child welfare, antenatal, postnatal and other services. A typical mother would have to attend clinic sessions two to three times each month, once for antenatal services, again for child welfare services and a third time for family planning services. In order to increase the accessibility of services, the MCH/FP Unit is pilot testing the integration of these services on a daily basis at several clinics. Beginning in late 1984, this family-oriented approach was initiated in two clinics in the Southeast District. At these clinics, the entire family can obtain all MCH/FP services on one day. Initial studies indicate that this approach is immensely advantageous to both health personnel and the community.

1.4 PURPOSE OF THE BOTSWANA FAMILY HEALTH SURVEY

In 1983, on the tenth anniversary of the national MCH/FP programme, the Botswana Family Health Survey (BFHS) was scheduled. The main purpose of the survey was to collect the basic health and family planning data needed for planning and evaluating MCH/FP activities in Botswana; thus, the BFHS was considered to be an adjunctive evaluation tool for increasing the efficiency and efficacy of the MCH/FP programme.

Accurate measurement of the MCH/FP programme performance on a continuing basis has been difficult in Botswana. The programme's service statistics have a number of weaknesses including the following:

- Service statistics presently do not provide information to identify women in need of family planning and MCH services. Information is provided only on the user and not the nonuser.

- Service statistics do not presently provide any indication of contraceptive use or health care sought from traditional healers, private physicians and other sources.

- Service statistics presently are not compiled and disseminated rapidly enough to facilitate programme planning and decisions.

The essential MCH/FP information gathered in the BFHS thus serves to supplement and complement the service statistical system.

1.5 ORGANIZATION OF THE REPORT

The following is a resume of the contents of the remainder of the report:

- Chapter 2 - Detailed information is given on the organizational framework, timetable, questionnaire development, sample design, field activities and data processing for the BFHS.

- Chapter 3 - Demographic and socio-economic characteristics of the respondents likely to influence health and contraceptive behavior are highlighted.

- Chapter 4 - Fertility behavior and attitudes are discussed.

- Chapter 5 - The prevalence of breastfeeding and postpartum abstinence among mothers with a recent birth is explored.

- Chapter 6 - MCH indicators including estimates of the infant mortality level are presented.

- Chapter 7 - Information on the levels of contraceptive knowledge and ever use is considered.

- Chapter 8 - Current contraceptive prevalence, indicators of user satisfaction, reasons for nonuse and the level of unmet need are reviewed.

- Chapter 9 - Findings about womens' awareness of the availability of health and family planning services are examined.

Chapter 2
SURVEY DESIGN

The Botswana Family Health Survey was the first national-level study of fertility and family planning behavior and attitudes among women of reproductive age (15-49 years) in Botswana. This chapter describes major aspects of the survey design, particularly the content of the survey questionnaire, the organization and timing of field and data processing activities and the sampling plan.

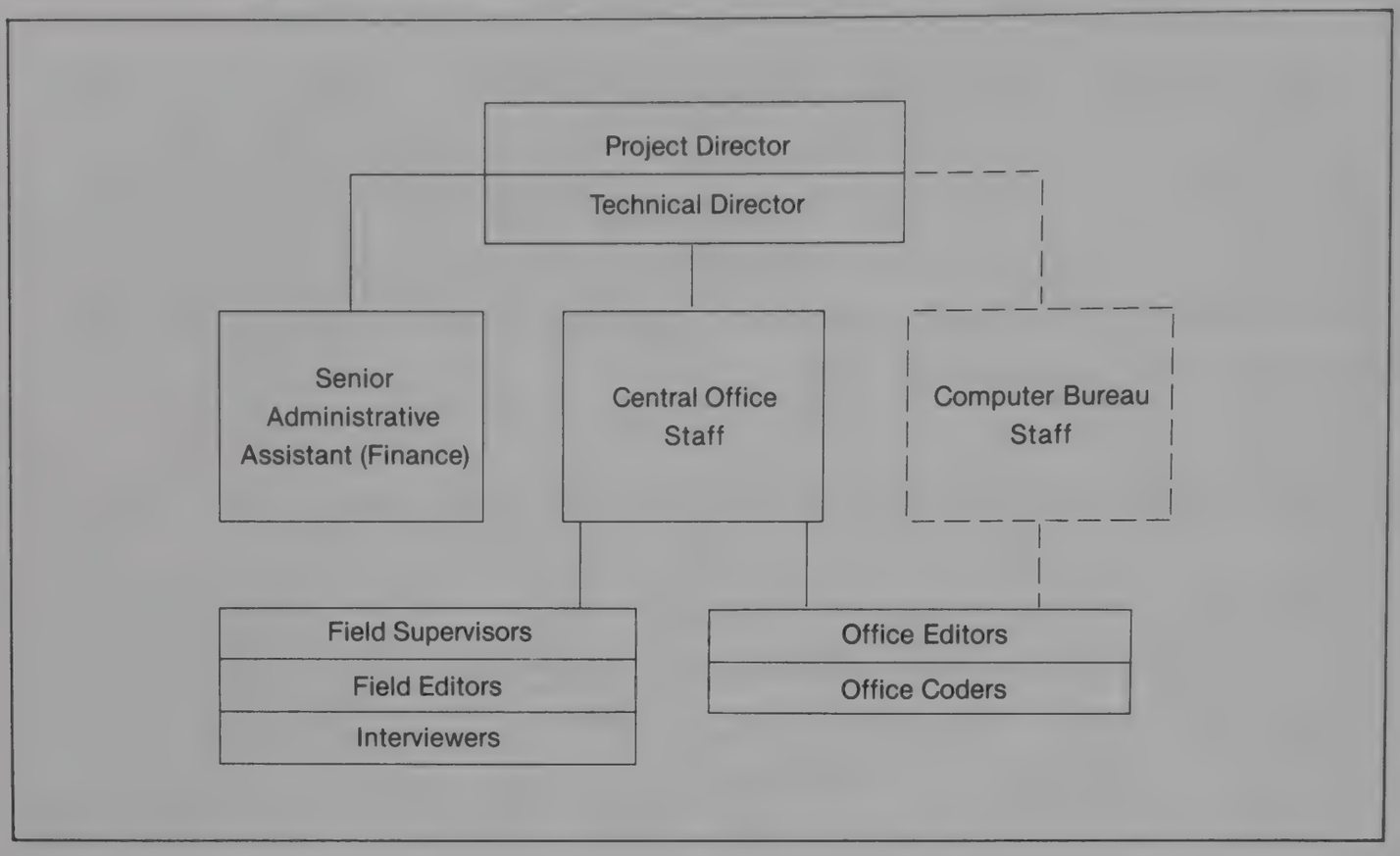
2.1 ORGANIZATIONAL FRAMEWORK AND SURVEY TIMETABLE

The Botswana Family Health Survey was carried out by the Family Health Division of the Ministry of Health during the period October, 1983 through July, 1985. Successful completion of the survey required the efforts and cooperation of numerous Ministries and individuals. Figures 2.1 and 2.2 describe the survey organizational framework and document the flow of information throughout the survey operations.

Mrs. W. Manyeneng, the Director of the Family Health Division, served as Project Director for the survey; she was responsible for the overall direction and administration of the survey. As the Technical Director, Mrs. M. K. Larson, Senior MCH/FP Officer, was responsible for the day-to-day supervision of activities throughout the course of the survey.

In addition to the senior staff, the Family Health Division recruited a Field Work Coordinator, Mr. F. Zufferey, who assisted the Technical Director in supervising activities, beginning with the development of the questionnaire through the completion of the coding and machine editing phases of the survey. When it became evident that increased supervision during the field phase was needed, the position of field controller was created. A team supervisor, Ms. L. Letshwiti, was promoted to this position.

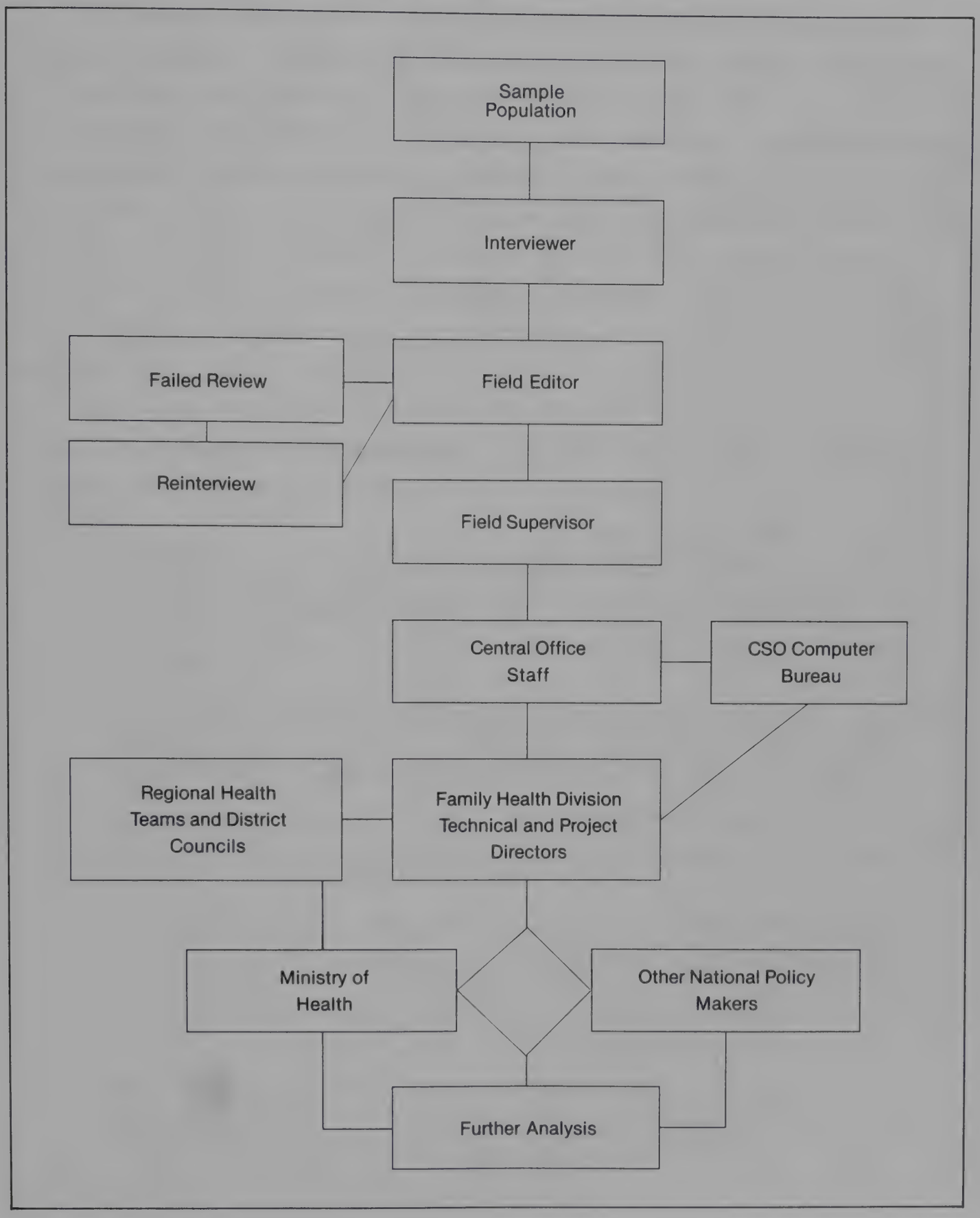
Figure 2.1
BOTSWANA FAMILY HEALTH SURVEY ORGANIZATION



The interviewing was conducted by sixteen female interviewers who had completed at least a Junior Certificate, although most of them had completed matric and had previous survey experience. It was feared that the relative youth of the interviewers, whose ages averaged 19 years, would make interviews with older women difficult. However, this did not prove to be the case. A list of field and central office staff is included in Appendix A.

BFHS activities were completed within a period of twenty-three months from October, 1983. A detailed schedule of project activities is included in Table 2.1. The original work plan for the survey called for a male survey to be fielded as the second phase of the Botswana Family Health Survey. Because of time and personnel limitations, it was decided not to conduct that phase of the survey.

Figure 2.2
BOTSWANA FAMILY HEALTH SURVEY FLOW OF INFORMATION



2.2 QUESTIONNAIRE DEVELOPMENT AND PRETEST

The major objective of the Botswana Family Health Survey was to obtain information about health practices in Botswana. Special emphasis was given to collecting data regarding family planning and fertility intentions which were needed in planning for and evaluating the MCH/FP activities of the Family Health Division. These objectives were taken into account in developing the BFHS questionnaire.

TABLE 2.1

SCHEDULE OF ACTIVITIES

Activity	Starting Date	Period
Survey Planning and Questionnaire Development	October, 1983	4 weeks
Pretest Training	December, 1983	2 weeks
Pretest	January, 1984	2 weeks
Household Listing Operations	October, 1983	15 weeks
Training of Field Personnel	February, 1984	3 weeks
Fieldwork Operations	March, 1984	16 weeks
Coding	April, 1984	16 weeks
Data Entry and Editing	May, 1984	12 weeks
Analysis and Report Writing	October, 1984	16 weeks
Report Publication	March, 1985	20 weeks

The BFHS questionnaire was designed for easy and rapid administration. It was developed by staff of the Family Health Division based on: (1) the

core questionnaire prepared by Westinghouse Health Systems for the international Contraceptive Prevalence Survey Project, (2) an analysis of MCH/FP programme information needs and (3) experience gained in a similar survey conducted in Gaborone and Kgatleng District (du Pradal, 1985). After consultation with other personnel from the Ministry of Health, members of the Health Research and Development Committee, faculty of the University of Botswana, personnel from the Central Statistics Office and MCH/FP field staff, further adaptations were made to fit the Botswana situation. Use of the modified CPS core questionnaire for the BFHS has provided not only much needed information on health and family planning in Botswana, but it has also resulted in data comparable to that of other countries where similar surveys have been completed.

The BFHS questionnaire contained a minimal number of questions needed to investigate the following areas:

- Eligibility and background characteristics. Questions on age, marital status, education level, literacy, work status, type of work and religion were included in order to provide information on characteristics likely to influence health and contraceptive behavior.

- Health care and fertility behavior and attitudes. Data was collected on patterns of nuptiality, fertility, breastfeeding, prenatal and postnatal care as well as fertility attitudes.

- Knowledge of family planning. Questions were designed to determine the level of both prompted and unprompted knowledge of specific family planning methods.

- Contraceptive use. Data was collected on the level of ever use and current use of family planning methods. Duration of use, method preferences and perceived problems with various methods were investigated. For women not using family planning, questions were included on the reasons for nonuse.

- Awareness of availability of contraceptive services. Information was collected regarding a woman's knowledge of sources for various contraceptive methods and her perceptions about the availability of those methods.

After the questionnaire was developed in English, it was translated into Setswana. In order to check the validity of the translation, arrangements were made for an independent translation of the Setswana questionnaire back into English. The questionnaire was then pretested by a team of specially trained interviewers.

The pretest involved the interviewing of 140 women in three divergent areas. These locations were selected to reflect possible language problems, differences in understanding and general receptivity to the interviews in both northern and southern Botswana and among the rural and urban populations. A one day seminar conducted with the field staff following the pretest indicated that the respondents had been cooperative and that the questionnaire was well understood and could be efficiently administered. The pretest personnel themselves were surprised that family planning questions which they considered sensitive were so openly answered without embarrassment.

Based on the pretest results, some minor changes were made to clarify the Setswana wording and phrasing, and several questions were identified as requiring additional probing. The final English version of the BFHS questionnaire is included in Appendix B of this report.

2.3 TRAINING AND FIELD ACTIVITIES

Before any field activities began, the field staff was thoroughly trained in the various aspects of the survey operations. Two separate training manuals were prepared to detail basic information which would be needed in the field: (1) Manual for Supervisors and Field Editors and (2) Interviewers' Instructions.

After a five day training session for supervisors and field editors, interviewers joined the group for an additional fourteen days of training. The training included an overview of the MCH/FP programme in

Botswana, a detailed description of contraceptive methods and how they work, introduction to field procedures and the questionnaire, a review of good interviewing techniques and a rigorous programme of practice interviews including mock interviews and actual field interviews in non-sample areas.

The fieldwork began March 15, 1984 and was completed on July 13. The survey was carried out by four teams. Each team was composed of a supervisor (male or female), field editor and four interviewers (female). The teams were responsible for identifying and interviewing all eligible women in pre-selected households. Up to three visits were made in order to complete interviews with all eligible women in each household.

2.4 QUALITY CONTROL

Throughout the BFHS, the quality of the data was emphasized and controlled from both the field and the office (Refer to Figure 2.2). During the early stages of the fieldwork, each supervisor and field editor was instructed to observe interviews and provide assistance where errors were detected or communication was inadequate. Observation checklists were used to rate interviewer performance and to pinpoint individual weaknesses and strengths. Interviewers were formally observed and rated an average of 3.6 times during the survey.

In addition to the field observation, a total 313 respondents (approximately 10 percent of the sample) were reinterviewed by field editors or supervisors in order to check on the quality of interviewers' work. To verify that the interviewers had selected the right households and correctly identified eligible women, the supervisor also spot-checked respondent selection. As another quality control measure, review sessions were held to reinforce basic interviewing procedures and to discuss any errors detected during the field observation and reinterviewing.

The most important quality control measures during the BFHS were the field and office editing of the questionnaires. In the field, in order to facilitate the correction of errors before a team left a particular sampling area, completed questionnaires were submitted to the field editors on a daily basis and were edited immediately. Once the questionnaires were received at the central office, they were registered and again edited by specially trained office editors in order to identify errors which were not detected in the field. Where it was not possible to correct errors or resolve inconsistencies using the information contained in the questionnaires, callbacks were scheduled. Around five percent of the questionnaires required a callback after office editing.

2.5 DATA PROCESSING

After careful field and office editing, questionnaires were coded at the central office by a team of eight trained coders. Answers to the open-ended and semi-open ended questions were coded using the Botswana Family Health Survey Coding Manual; the rest of the questionnaire followed a pre-coded format. Entries were edited by a second coder before being batched and sent to the Computer Bureau of the Central Statistics Office for keypunching, machine editing and further data processing. The machine editing of the data included structure, range and consistency checks.

2.6 SAMPLE DESIGN

The main objective of the BFHS was to provide information on the knowledge and utilization of health and family planning services among a representative national sample of women of reproductive age (15-49 years)[1], regardless of marital status. In addition, the survey was

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[1] The survey design called for all women between the ages of 15 and 56 years to be asked questions about their age and date of birth. Individual interviews were then completed with women between the ages of 15 and 50 years.

intended to permit a detailed understanding of the differences between urban and rural women with respect to knowledge and use of MCH and contraceptive services. Thus, the BFHS sample design called for urban areas to be oversampled relative to rural areas.

2.6.1 Selection of the Sample

To select the BFHS sample, a two-stage design was recommended. The first stage involved the selection of blocks, small geographic units into which the 1981 census enumeration areas had been divided for purposes of the Continuous Household Integrated Program of Surveys (CHIPS). Prior to first stage sample selection, the blocks were stratified by area of residence (urban and rural).

In addition, within rural areas, blocks were grouped into the following six substrata: (1) cattle post; (2) freehold farm; (3) lands area; (4) village I (blocks with fewer than 120 dwellings); (5) village II (blocks with 120-175 dwellings); and (6) village III (blocks with more than 175 dwellings).

The first stage selection process differed in urban and rural areas. In urban areas, the total expected sample size was fixed at 1,000 households. During the first stage selection, blocks in urban areas were systematically selected with probabilities proportional to the size of the block (i.e., the number of households reported in the block in the 1981 census) so as to yield an average sample size at the second stage of selection of 35 households.

In rural areas, the total desired sample size was set at 2,500 malwapa (dwelling units)[1]. At the first stage, in each rural stratum,

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[1] According to the 1981 census, a lolwapa (plural: malwapa) is a compound of a given household (or more than one household) consisting of one or more huts and a granary within a courtyard, surrounded by a reed fence, a wooden palisade, or low earthen wall or something similar (Central Statistics Office, 1982b, Annex 2, p. 3.).

TABLE 2.2

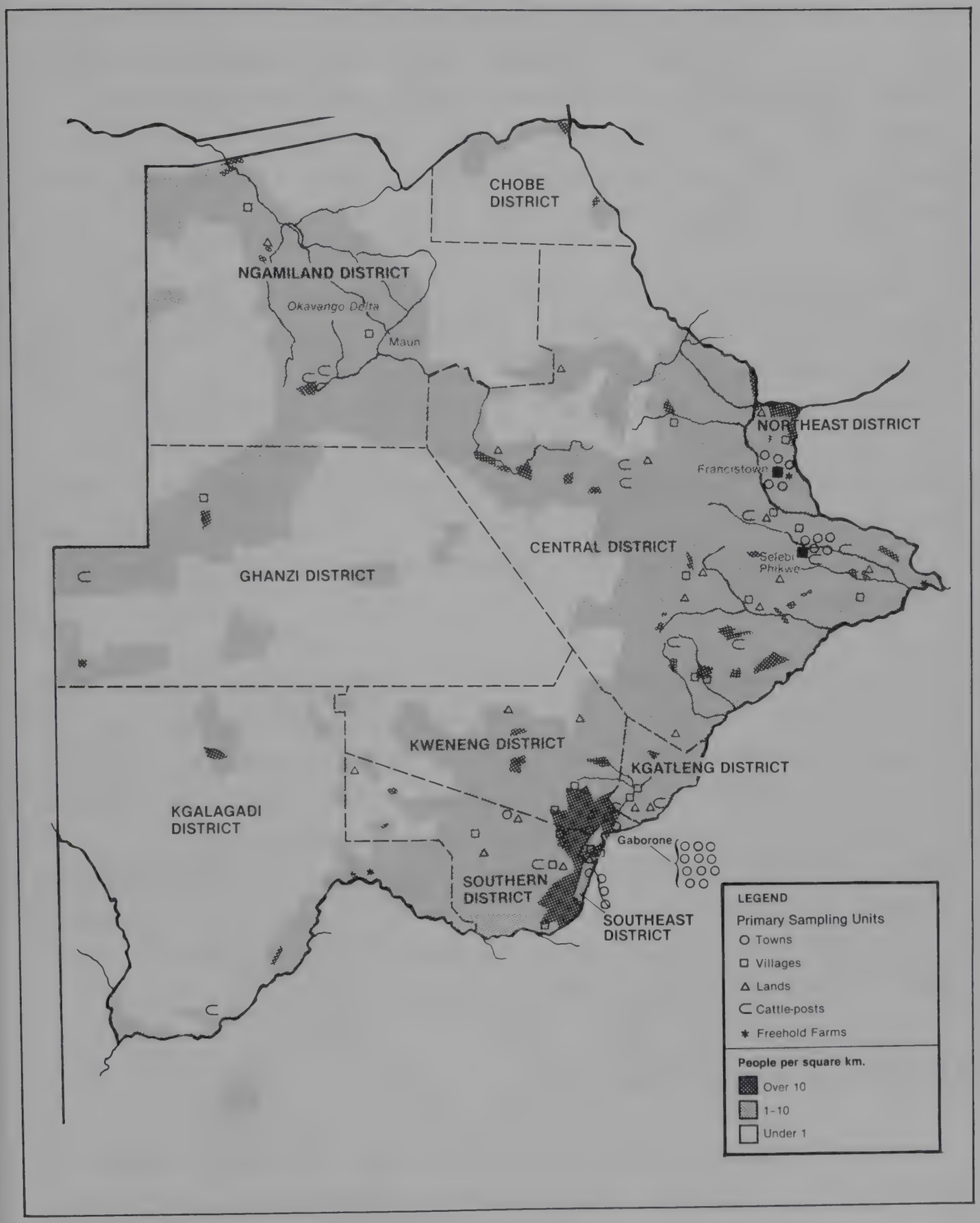
FIRST STAGE SAMPLING FRACTIONS AND THE NUMBER OF PSUS (BLOCKS) SELECTED BY SAMPLING STRATA, BOTSWANA FAMILY HEALTH SURVEY, 1984

Strata	First Stage Sampling Fraction	Number of PSUs Selected
Total		96
Urban	PPS	28
Rural		
Cattlepost	1/42	13
Lands	1/42	25
Freehold farms	1/42	3
Village I	1/42	8
Village II	1/21	18
Village III	1/21	1

a fixed number of blocks was selected to provide the required number of malwapa. The systematic random selection of blocks in each stratum was carried out independently from that in the other strata. Table 2.2 shows the first stage sampling fractions and the distribution of the 96 PSUs selected in the BFHS by strata. Figure 2.3 shows the geographic location of all of the first stage sampling points (blocks).

Prior to the second stage selection, all malwapa/households in the BFHS sample blocks were listed. The listing operation was carried out during the period December, 1983 through February, 1984 by three teams who were recruited and specially trained for this task. Following instructions included in the Botswana Family Health Survey Listing Manual, each team visited its assigned sample blocks and, after identifying the boundaries of the block, systematically listed all of the

Figure 2.3
DISTRIBUTION OF SAMPLING POINTS



malwapa/households in the block. In rural areas, all of the households living in a lolwapa were identified during this listing operation and the names of the heads of the household(s) were recorded on the listing form along with the address of the lolwapa. To assist in locating the selected malwapa during the fieldwork, each lolwapa was assigned an identification number which was written on the door of the unit. A sketch map showing the location of the malwapa also was prepared for all rural sample blocks.

When the total numbers of dwelling units/households listed by the survey teams were compared to the total number expected based on the 1981 census results, it was apparent that there was a general out-migration of residents from some sample blocks in the lands, cattlepost and farm areas. At the time of the listing, Botswana was experiencing a third consecutive year of drought. Typical observations of the listing teams about drought areas were "People have moved from this lands area to the village because of drought" and "Gaphuti cattle post area is abandoned because there is no water."

After each sample block was listed, a systematic random sample was chosen in such a way that the overall probability of selection for malwapa in each rural strata was 1 in 84. In urban areas, an average of 35 households were selected from each sample block. This final stage of the sample selection process resulted in the selection of 3,711 malwapa/households. The design called for age data to be collected from all women between the ages of 15 and 56 years living in these selected units. Complete interviews were to be conducted with all women identified as being in the reproductive ages 15 to 49 years.

2.6.2 Outcome of the Fieldwork

Table 2.3 summarizes the results of the BFHS fieldwork. A total of 2,974 out of 3,711 malwapa (or 75 percent) selected for the sample were

found to be occupied during the survey. All of the vacant units were in rural areas. The comparatively high rural vacancy rate had been expected, both because of the drought and of the pattern of seasonal occupancy of dwellings in the lands and cattle post areas.

TABLE 2.3

SUMMARY OF RESULTS OF THE FIELDWORK, BOTSWANA FAMILY HEALTH SURVEY, 1984

Result	Total	Urban	Rural
Occupancy of Sample Dwellings			
Total Number	3,711	980	2,731
Total Percent	100.0	100.0	100.0
Occupied	80.1	100.0	73.0
Vacant	18.8	0.0	25.5
Address not found/not a dwelling	1.1	0.0	1.5
Results of Household Interviews			
Total Number	2,974	980	1,994
Total Percent	100.0	100.0	100.0
Interview completed	94.0	100.0	91.2
Refused	0.1	0.0	0.1
No adult at home/other	5.9	0.0	8.7
Results of Individual Interviews			
Total Number	3,342	1,691	1,651
Total Percent	100.0	100.0	100.0
Completed	97.8	97.5	98.0
Respondent not at home	1.7	2.0	1.5
Refused	0.1	0.3	0.0
Other	0.4	0.2	0.5

TABLE 2.4

THE TOTAL NUMBER (UNWEIGHTED AND WEIGHTED) OF WOMEN AGE 15-49 SUCCESSFULLY INTERVIEWED BY AREA OF RESIDENCE, BOTSWANA FAMILY HEALTH SURVEY, 1984

	Unweighted	Weighted
Total	3,064	3,064
Urban	1,592	726
Rural	1,472	2,338

A total of 2,974 households were identified in the urban and rural sample blocks. Household interviews in which information was collected on the age and sex of all members of a household at the time of the survey were completed with 94 percent of these households. The percentage of cases in which the household interview was completed was greater in urban than in rural areas (100 percent vs. 91 percent, respectively).

A total of 3,344 women aged 15-55 years were identified in the households contacted by the BFHS teams, an average of 1.2 women per household. Age data was collected from 3,267 (98 percent) of these women. Individual interviews were completed with 3,064 women found to be between the ages of 15 and 50 years. Individual response rates were almost identical in urban and rural areas.

As discussed earlier, the sample design called for urban areas to be oversampled relative to rural areas. Table 2.4 shows both the unweighted and weighted number of respondents aged 15 to 49 years. The weighted totals are used in reporting the survey results throughout the remainder of this report.

Chapter 3
BACKGROUND CHARACTERISTICS

SUMMARY: A comparison of the age distribution of the BFHS respondents with that for the 1981 census population indicates that the sample is a representative of women in the reproductive ages in Botswana. The average woman interviewed in the survey was 28 years old. There is a nearly two year difference between the mean age of urban and rural women.

Educational attainment among women in Botswana is high. Two out of every three women are able to read a basic sentence in Setswana, and four out of every ten women have completed primary school. Around one-third of the women work for pay; the majority of these women are employed in unskilled occupations, largely as domestic help. Most women are affiliated with an organized religion. Urban women are more likely to have attended school, to be working for pay and to profess an affiliation with an organized church than are rural women.

Men in Botswana are somewhat less likely to have attended school than women. However, among those who have gone to school, the level of educational attainment is greater among men than women.

Information on a number of background characteristics including age, educational level, literacy status, employment status and occupation was collected from the 3,064 women age 15-49 who were interviewed in the BFHS. These data are examined in this chapter in order to provide a socio-demographic profile of the respondents.

3.1 AGE

Age data were collected by asking each respondent how old she was on her last birthday and the month and year of her birth. Any inconsistencies between the answers to these questions were reconciled before a

TABLE 3.1

PERCENT DISTRIBUTION OF BFHS RESPONDENTS BY THE COMPLETENESS AND QUALITY OF AGE DATA AND AREA OF RESIDENCE, BOTSWANA, 1984

Completeness and Quality of Age Data	Total	Urban	Rural
Total Number	3,064	723	2,341
Total Percent	100.0	100.0	100.0
Both age and date of birth given	77.4	86.6	74.6
Responses consistent	39.3	44.2	37.8
Responses not consistent	38.1	42.4	36.8
Only age given	19.1	12.7	21.0
Interviewer estimated age	3.5	0.7	4.4

final age response was entered by the interviewer. Table 3.1 provides some indication of the completeness and consistency of the age reporting in the BFHS. The table shows that, while the majority of respondents answered both the age and date of birth questions, 19 percent did not know their birth date, and four percent did not know their age. Table 3.1 also indicates that, among the respondents who answered both questions the answers given were inconsistent in about one-half of the cases. Not surprisingly, the age data is both more complete and more consistent for urban than for rural women.

Table 3.2 presents the age distributions of BFHS respondents and of women aged 15-49 years enumerated in the 1981 census. The table shows that, for the BFHS sample as a whole, 42 percent are less than 25 years old, 43 percent fall into the 25-39 age groups and 15 percent are 40-49 years old. The average (mean) age of a respondent is 28 years.

TABLE 3.2

THE PERCENT DISTRIBUTIONS OF WOMEN AGE 15-49 INTERVIEWED IN THE BFHS AND ENUMERATED IN THE 1981 BOTSWANA CENSUS BY AREA OF RESIDENCE AND AGE

	Total		Urban		Rural	
	BFHS	1981 Census[a]	BFHS	1981 Census[a]	BFHS	1981 Census[a]
Age	Percent	Percent	Percent	Percent	Percent	Percent
Total Number	3,064	211,465	723	44,886	2,341	166,579
Total Percent	100.0	100.0	100.0	100.0	100.0	100.0
15-19 years	19.5	23.4	23.6	23.6	18.3	23.4
20-24 years	22.0	21.6	23.7	26.3	21.4	20.4
25-29 years	18.3	17.0	20.5	19.5	17.7	16.4
30-34 years	13.8	12.2	15.0	12.3	13.4	12.2
35-39 years	11.3	9.7	8.0	8.3	12.4	10.1
40-44 years	9.0	8.5	6.2	5.9	9.9	9.0
45-49 years	6.1	7.4	3.0	4.0	7.0	8.3
Mean Age	28.3	27.9	26.5	26.5	28.8	28.5

SOURCE: [a] Central Statistics Office, 1983, Table 6.

A comparison of the BFHS age distribution with the census distribution indicates that the sample population is generally representative of all women in the reproductive ages in Botswana. The greatest difference is observed for the age group 15-19 years; the percentage of women in this cohort at the time of the census was about four percent higher than that reported in the BFHS (Figure 3.1). The apparent undersampling of teenagers reflects the fact that they were more likely to be away from home at the time of the interviewer's visit (e.g., looking for employment) as well as the fact that some teenagers living in dormitories or other group quarters were excluded from coverage in the BFHS because the survey was based on a household sample.

Figure 3.1
COMPARISON OF THE AGE DISTRIBUTIONS FOR WOMEN AGE 15-49, 1981 BOTSWANA CENSUS AND 1984 BOTSWANA FAMILY HEALTH SURVEY

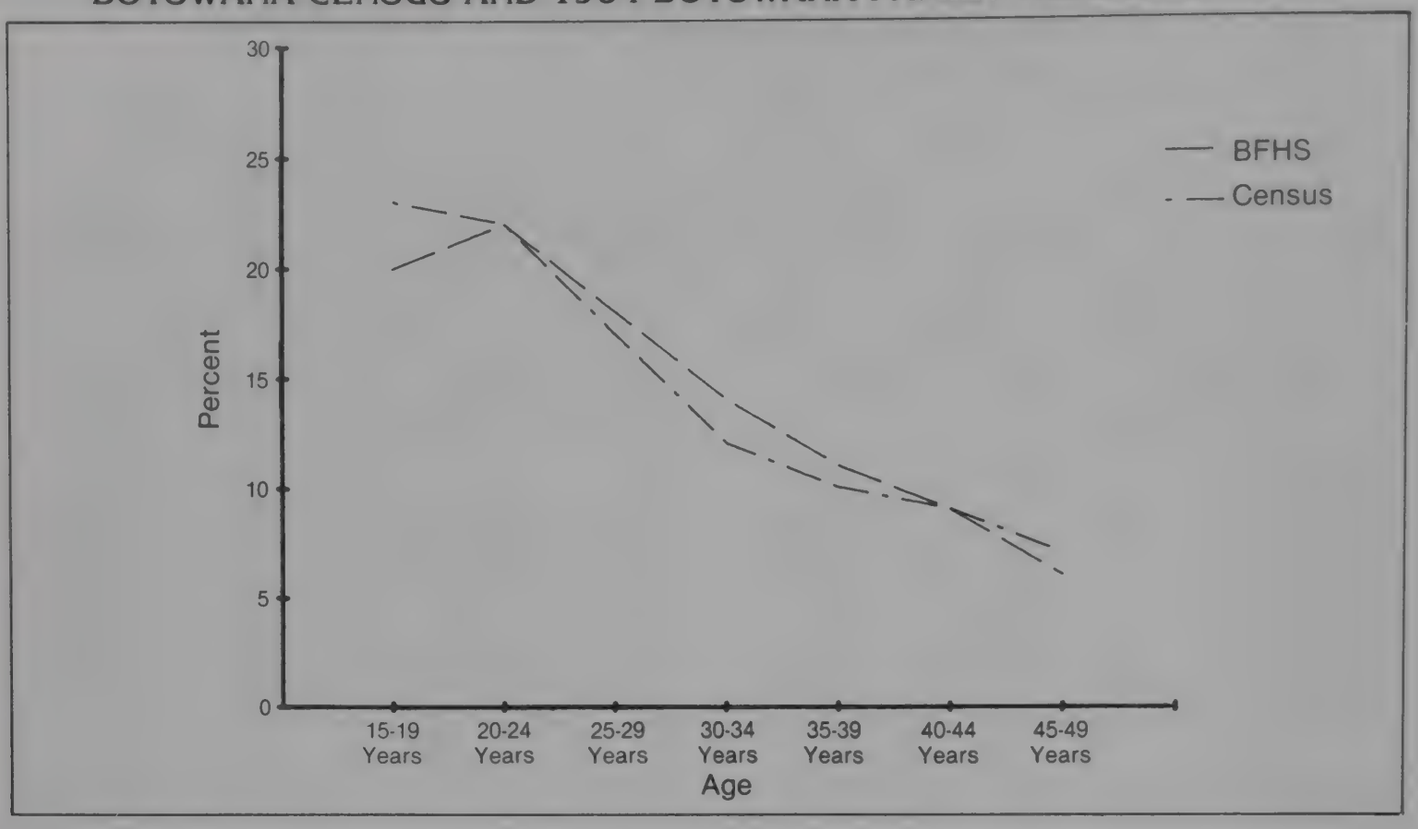
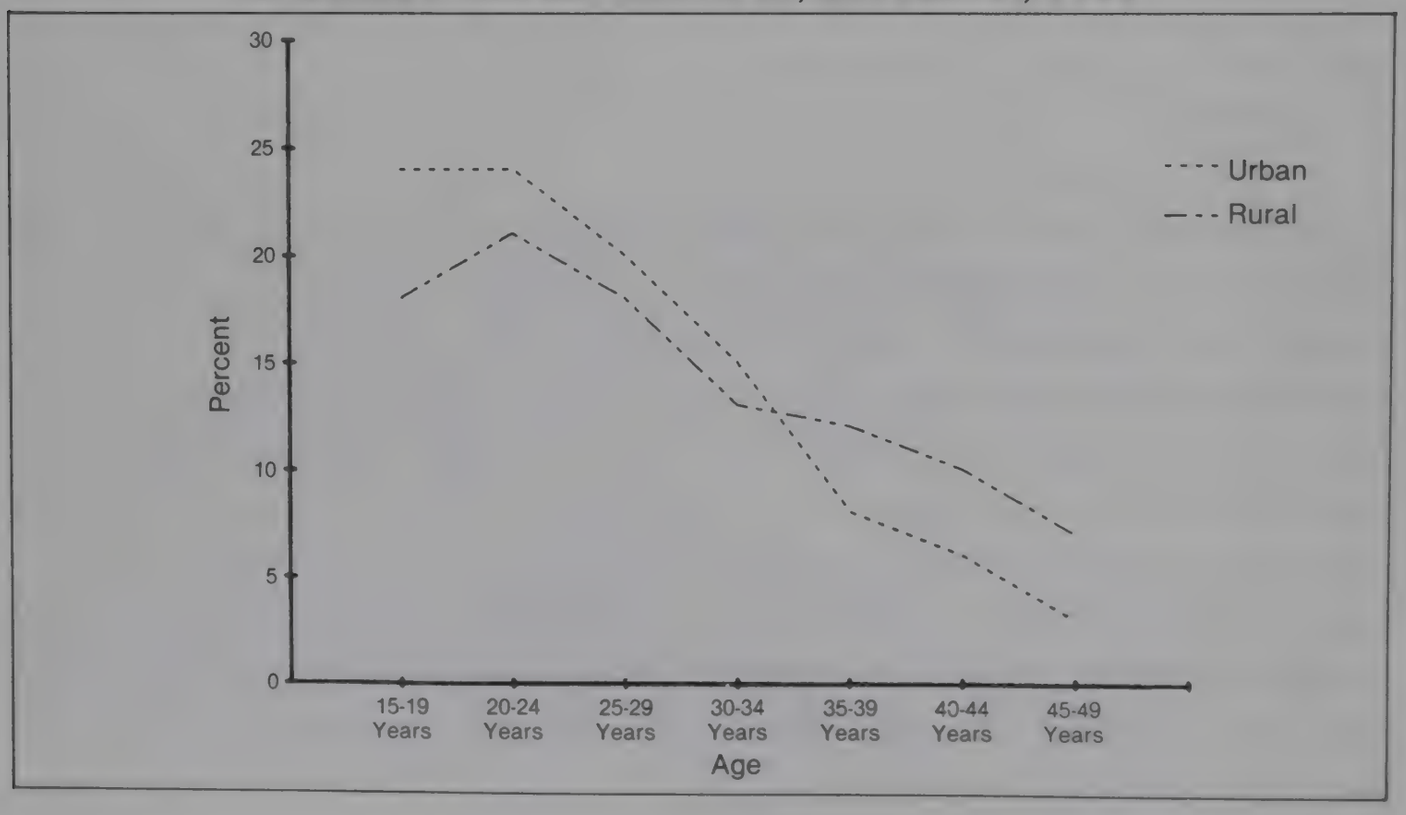


Figure 3.2
COMPARISON OF THE AGE DISTRIBUTIONS FOR URBAN AND RURAL WOMEN AGE 15-49, BOTSWANA, 1984



An examination of both the BFHS and the census distributions suggest that, on the whole, urban women are somewhat younger than rural women (Figure 3.2). For example, the proportion of BFHS respondents aged 15-24 years is 47 percent in urban areas compared to 40 percent in rural areas, and there is a two year difference between the mean age of urban respondents (26.5 years) and rural respondents (28.8 years). These results may be owed to a greater tendency toward migration into urban areas among younger than older women as a consequence of the pull of better educational and employment opportunities for the young in urban areas.

3.2 EDUCATIONAL LEVEL

To collect information on education level, respondents were first asked if they had ever attended school. Those who had attended school were asked about the last grade at school which they passed. Based on these responses, women interviewed in the BFHS have been grouped into four education status categories: no education, less than primary completed (1-6 years), primary completed (7 years) and some secondary or more (8 years or more).

Table 3.3 indicates that, overall, about one out of every three women in Botswana has never attended school. Among women attending school, most have not gone beyond the primary level; the percentage of women attending but not completing primary school is 29 percent while 24 percent have completed the primary level. About one out of every six women (16 percent) has had at least some secondary education.

Female education opportunities have improved in Botswana in recent years. Reflecting this trend, Figure 3.3 indicates that the percentage of women who have had at least some formal education decreases with age from a high of 85 percent among women age 15-19 to only 51 percent among women in the 45-49 cohort. Table 3.3 shows that younger women are not only more likely to have attended school, but those who have gone to

TABLE 3.3

PERCENT DISTRIBUTION OF ALL WOMEN BY EDUCATIONAL STATUS AND AGE, BOTSWANA, 1984

Educational Status	Total	15-19 Years	20-24 Years	25-29 Years	30-34 Years	35-39 Years	40-44 Years	45-49 Years
Total Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No education	30.8	15.1	24.4	33.1	37.1	38.9	43.6	48.8
Less than primary completed	29.3	16.5	21.0	24.5	35.1	43.3	49.7	44.9
Completed primary	24.0	38.9	33.9	25.1	18.3	11.6	3.3	3.3
Some secondary and above	16.0	29.5	20.7	17.3	9.5	6.2	3.4	2.9

Figure 3.3
PERCENT WITH FORMAL EDUCATION BY LEVEL OF EDUCATION AND AGE, BOTSWANA, 1984

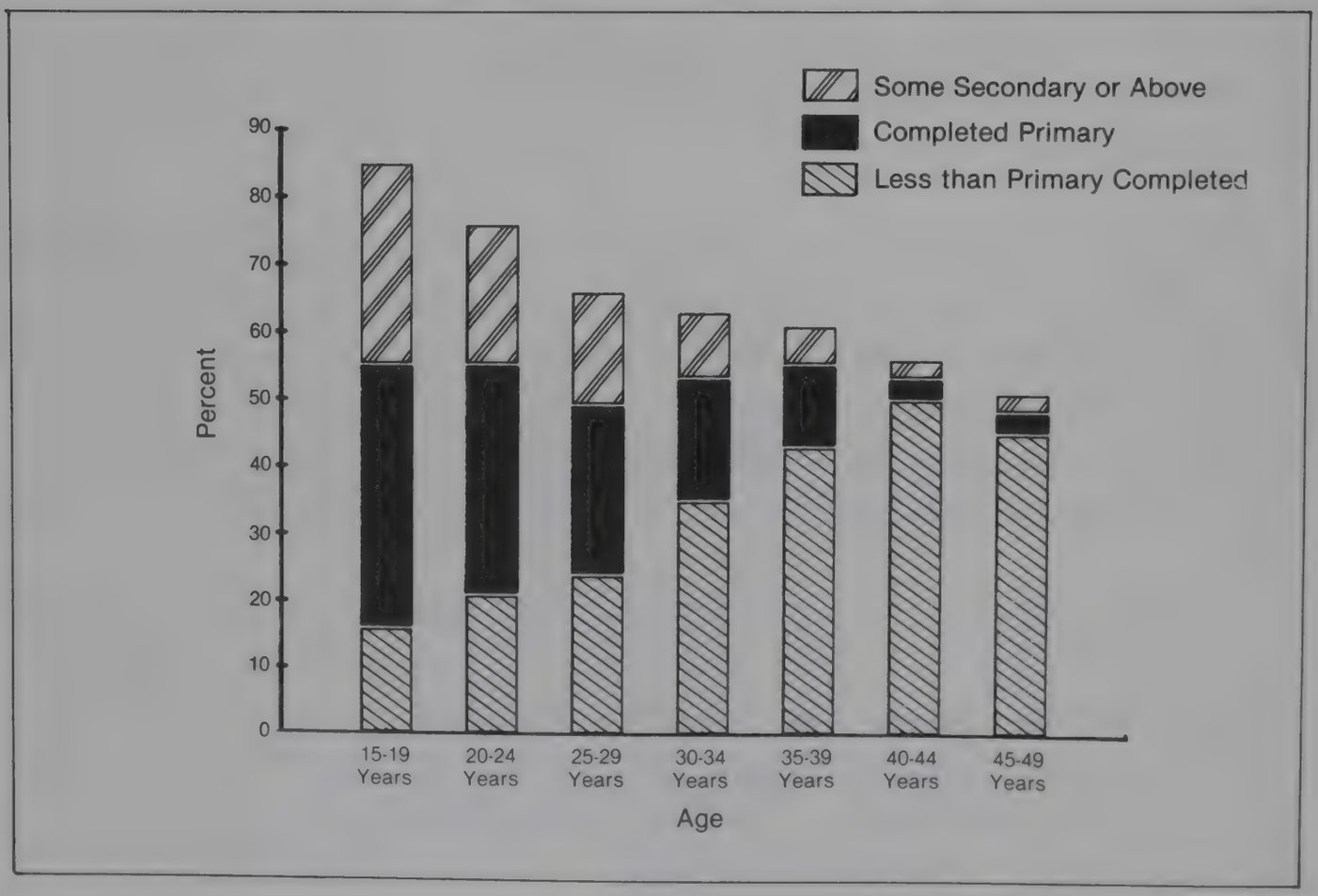


TABLE 3.4

PERCENT DISTRIBUTION OF ALL WOMEN BY EDUCATIONAL STATUS AND AREA OF RESIDENCE, BOTSWANA, 1984

Educational Level	Total	Urban	Rural
Total Number	3,064	723	2,341
Total Percent	100.0	100.0	100.0
No education	30.8	17.8	34.8
Less than primary completed	29.3	24.6	30.7
Completed primary	24.0	29.8	22.1
Some secondary and above	16.0	27.8	12.4

school are more likely to have attained a higher level of education than older women. For example, the percentage of women in the 15-19 age group who have completed primary school (68 percent) is more than double the percentage completing primary among women age 30-34 (28 percent) and ten times the percentage of primary school graduates among women in the 45-49 age group (6 percent).

Not surprisingly, urban women are both more likely to have been to school and to have attained higher educational levels than rural women. For example, Table 3.4 indicates that, for every urban woman who has no education in Botswana, there are two rural women who have never attended school and that, for every two women with some secondary education in urban areas, there is only one woman who has reached the secondary level in rural areas. Overall, 82 percent of urban women have had at least some formal education compared to only 65 percent of rural women.

3.3 LITERACY STATUS

In order to determine their literacy status, women who never attended school as well as those who had not gone beyond the primary level in

TABLE 3.5

PERCENT LITERATE AMONG ALL WOMEN BY AGE AND AREA OF RESIDENCE, BOTSWANA, 1984

Age	Total	Urban	Rural
Total	65.7	79.7	61.3
15-19 years	82.8	93.6	78.4
20-24 years	69.5	77.0	67.0
25-29 years	67.1	77.4	63.5
30-34 years	60.3	74.5	55.3
35-39 years	58.2	74.8	54.9
40-44 years	48.1	70.4	43.8
45-49 years	44.7	66.7	41.7

school were asked if they could read a basic sentence is Setswana. (Women with a secondary or better education were assumed to be able to read.) Table 3.5 shows that literacy levels are high among women in Botswana, especially among younger women. Overall, two out of every three women in Botswana can read a basic sentence. By age, the percent literate decreases from a high of 83 percent among women in the 15-19 age group to a low of 45 percent among women age 45-49. More urban women (80 percent) than rural women (61 percent) are literate.

3.4 EMPLOYMENT STATUS AND OCCUPATION

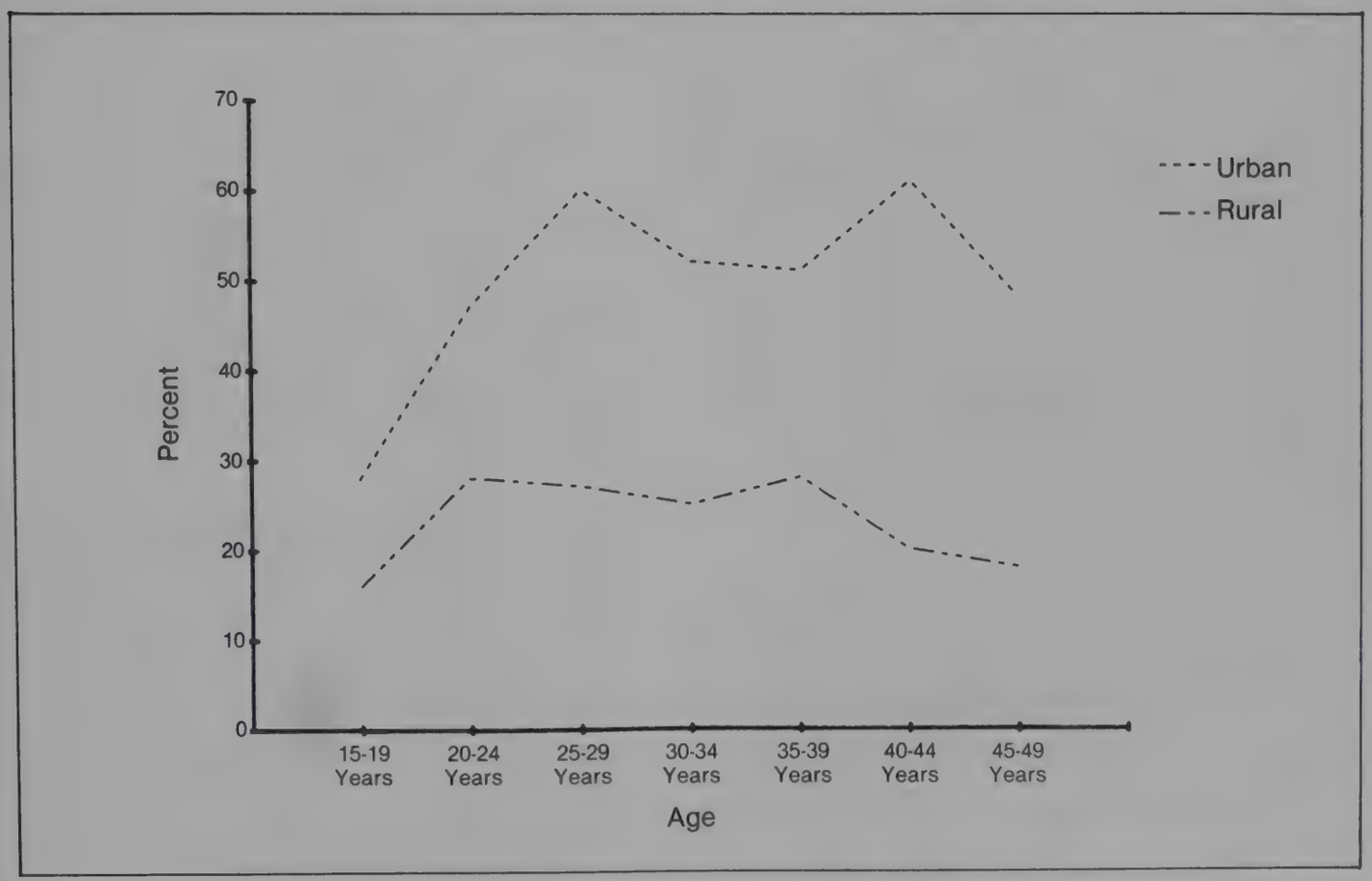
Respondents were asked whether they had done any work in the month before the interview for which they were paid either in cash or in kind. Table 3.6 shows that about three out of every ten women in Botswana works at some job for which she is paid in cash or kind. The proportion working for pay increases with age from about 20 percent among women age 15-19 to a peak of 36 percent among women in the 25-29 age group before declining to 21 percent among women in the oldest cohort (45-49).

TABLE 3.6

PERCENT WORKING FOR PAY AMONG ALL WOMEN BY AGE AND AREA OF RESIDENCE, BOTSWANA, 1984

Age	Total	Urban	Rural
Total	29.2	47.2	23.6
15-19 years	19.7	28.0	16.4
20-24 years	32.6	47.1	27.6
25-29 years	35.7	59.9	26.9
30-34 years	32.2	51.9	25.4
35-39 years	31.4	51.2	27.5
40-44 years	26.5	61.2	19.9
45-49 years	21.1	47.9	17.5

Figure 3.4
PERCENT WORKING FOR PAY BY AGE AND AREA OF RESIDENCE, BOTSWANA, 1984



Urban women are twice as likely as rural women to be gainfully employed. The proportion working for pay is 47 percent among urban women compared to 24 percent among rural women. Urban-rural differentials in the percent working for pay are observed for every age group in Table 3.6 but are especially notable among women age 40-49 years; the percent working for pay in these cohorts is around three times as great among urban women compared to rural women (Figure 3.4).

Table 3.7 shows that about one out of every two women involved in paid employment is working in an unskilled occupation, largely as domestic help. The majority of the other women working for pay are concentrated in professional/technical or sales occupations. The almost negligible proportion of women reported in agricultural occupations is somewhat surprising; it probably reflects the influence the drought has had on agricultural employment as well as the fact that such labor is largely seasonal and unpaid family work.

TABLE 3.7

PERCENT DISTRIBUTION OF WOMEN WORKING FOR PAY BY OCCUPATION AND AREA OF RESIDENCE, BOTSWANA, 1984

Occupation	Total	Urban	Rural
Total Number	894	341	553
Total Percent	100.0	100.0	100.0
Professional/technical	19.2	19.6	19.0
Clerical	4.2	6.4	2.9
Sales	10.7	11.2	10.3
Service	4.1	1.5	5.7
Skilled labor	3.3	1.7	4.3
Unskilled labor	52.0	53.9	50.9
Agricultural worker	1.2	0.3	1.7
Crafts	4.0	4.9	3.4
Other	0.7	0.0	1.1
Not stated	0.6	0.5	0.6

3.5 RELIGION

Respondents were asked about their religious affiliation. The results show that seven out of ten women in Botswana are affiliated with an organized religion (Table 3.8). The most prominent religious denominations are the Spiritual/African (34 percent), Protestant (23 percent) and Catholic (9 percent). The greatest difference in religious affiliation by place of residence is observed in the percentage reporting that they are not affiliated with any religion; 31 percent of rural women are in this category compared to only 20 percent of urban women.

TABLE 3.8

PERCENT DISTRIBUTION OF ALL WOMEN BY RELIGIOUS AFFILIATION AND AREA OF RESIDENCE, BOTSWANA, 1984

Religious Affiliation	Total	Urban	Rural
Total number	3,064	723	2,341
Total percent	100.0	100.0	100.0
Spiritual/African	33.5	38.8	31.9
Protestant	22.6	26.3	21.4
Catholic	9.4	10.1	9.2
Other religions	5.8	5.1	6.0
None	28.5	19.5	31.2
Not stated	0.2	0.1	0.3

3.6 PARTNER'S EDUCATIONAL STATUS

Currently in union respondents were asked about their partners' educational status. Table 3.9 shows the distribution of these women by the educational status of their partners and place of residence. Around 10 percent of all currently in union women are not sure about their partners' educational level, 38 percent say that their partners never

TABLE 3.9

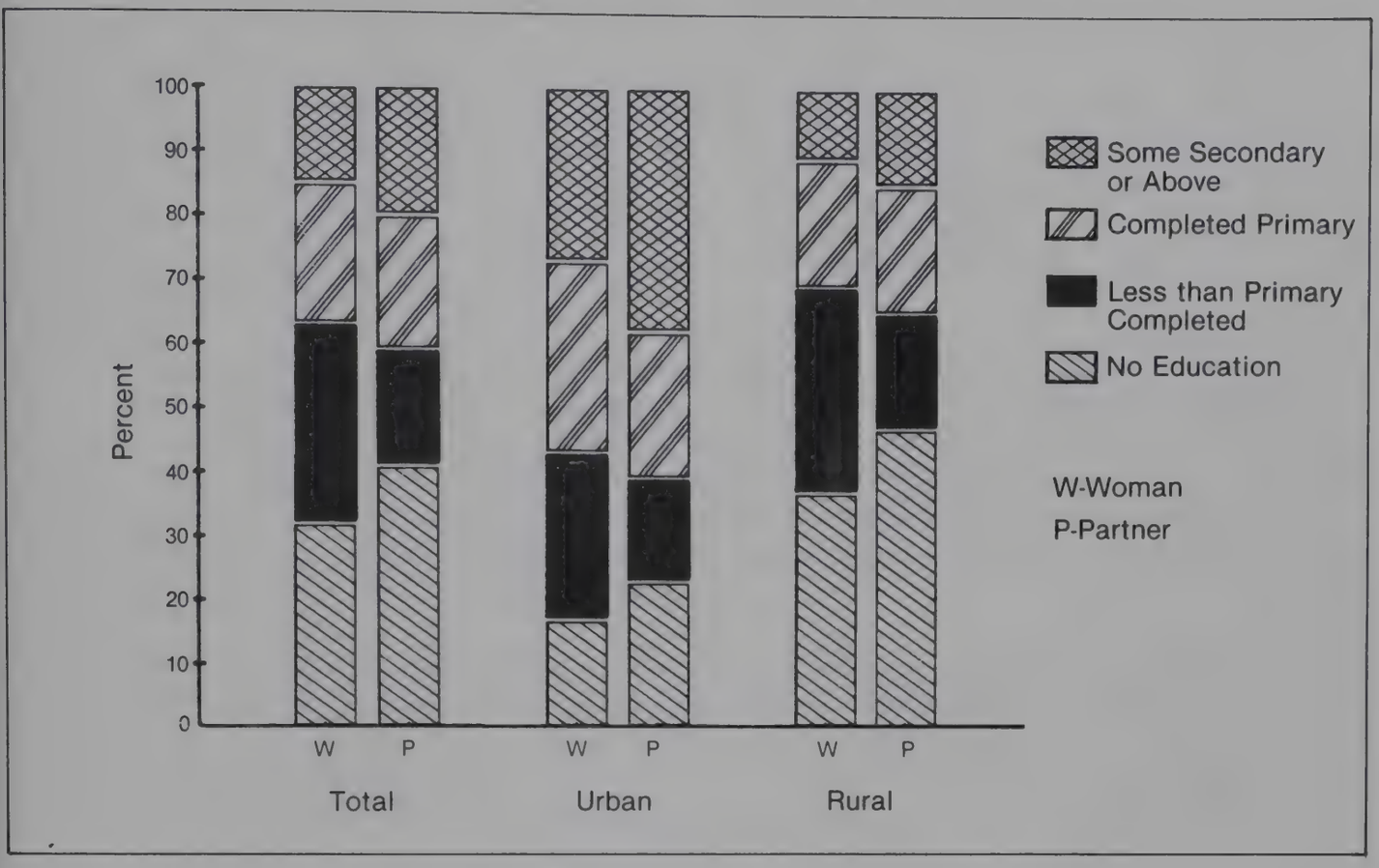
PERCENT DISTRIBUTION OF CURRENTLY IN UNION WOMEN BY THEIR PARTNERS' EDUCATIONAL STATUS AND AREA OF RESIDENCE, BOTSWANA, 1984

Partner's Educational Status	Total	Urban	Rural
Total Number	2,433	576	1,857
Total Percent	100.0	100.0	100.0
No education	37.5	20.4	42.7
Less than primary completed	15.9	14.1	16.4
Completed primary	18.4	20.7	17.7
Some secondary and above	17.9	33.0	13.2
Not sure	10.3	11.8	10.0

attended school, 34 percent that their partners had at least attended the primary level and 18 percent report that their partners had had at least some secondary education. The proportion of urban respondents reporting that their partners had attended school is greater than that of rural respondents (68 percent vs. 47 percent, respectively). Urban partners are also much more likely than rural partners to have completed at least the primary level (54 percent vs. 31 percent, respectively).

Figure 3.5 compares the educational status distributions of currently in union women and their partners for the 2,181 women who reported both their educational status and that of their partners. The comparison shows that, overall, the percentage of women with at least some education is higher among the women than their partners (68 percent vs. 58 percent, respectively). This somewhat surprising pattern is evident among rural couples but not among those couples living in urban areas. It reflects the fact that, in rural areas, boys often work at the cattle posts and, consequently, do not have an opportunity to attend school while girls generally live in the village and, thus, have greater access to educational facilities.

Figure 3.5
COMPARISON OF THE EDUCATIONAL STATUS DISTRIBUTIONS OF CURRENTLY IN UNION WOMEN AND THEIR PARTNERS BY AREA OF RESIDENCE, BOTSWANA, 1984



The expected pattern of male dominance in education is evident among those who have attended school. Overall, one out of every three men who had some education had attended secondary school compared to one out of every five women. Urban men who have had some education are considerably more likely than urban women with some education to have attended secondary school (49 percent vs. 33 percent, respectively). Among rural couples, the differential in the educational status among those women and their partners is not as great (17 percent vs. 28 percent, respectively).

Chapter 4
NUPTIALITY AND FERTILITY

SUMMARY: Most women of reproductive age in Botswana are in marital unions, either formal or informal. Urban women are more likely to be in informal unions than are rural women, and younger women in both urban and rural areas are more likely to be in informal unions than are older women. The average age at entry into first union is about 17 years for both urban and rural women and shows little evidence of change in the recent past.

Data on cumulative fertility indicate that women nearing the end of childbearing in Botswana have had an average of nearly seven births. This level is quite high, and there is little recent evidence that fertility is declining, with the current TFR estimated at 6.5 births per woman. However, there is some suggestion that fertility levels may be lower in the future, as the average woman says that she wants around 6 births and younger women want only around 5 births.

The majority of women in every age group want either to delay the next birth at least one year or to have no more children. Overall, about one-third of currently in union women want no more children, and another one-third want to delay the next birth at least one year. The achievement of lower fertility will depend on how successfully women in Botswana meet these objectives of spacing and limiting their births.

Attention is focused in this chapter on the nuptiality and fertility behavior of women in Botswana. First, BFHS data on marital status and trends in the age at first union are examined. Then data relating to cumulative and current levels of fertility are reviewed. Finally, information on family size desires is explored.

4.1 MARITAL STATUS

The BFHS included a series of questions designed to obtain information on the current marital status of all women interviewed in the survey. The first question focused on what may be termed "formal" marital status

and established whether a respondent considered herself to be married, divorced, separated, widowed or single (never married). The results presented in Table 4.1 show that 65 percent of the respondents reported themselves as being in a current marital union (legally married[1] or living in a consensual union), 6 percent said that they were divorced, separated or widowed and 29 percent indicated that they were single. Urban respondents were more likely than rural respondents to report that they were living in a consensual union (44 percent vs. 24 percent) and less likely than rural respondents to report that they were legally married (27 percent vs. 39 percent) or single (24 percent vs. 31 percent).

TABLE 4.1

PERCENT DISTRIBUTION OF ALL WOMEN BY INITIALLY REPORTED ("FORMAL") MARITAL STATUS AND AREA OF RESIDENCE, BOTSWANA, 1984

Marital Status	Total	Urban	Rural
Total Number	3,064	723	2,341
Total Percent	100.0	100.0	100.0
Married	36.2	27.3	39.2
Living in a consensual union	28.9	43.5	24.4
Divorced/Separated/Widowed	5.9	5.7	5.8
Never married	29.0	23.5	30.6

In designing the BFHS questionnaire, it was recognized that some women who were living with a partner at the time of the survey might not report themselves as married in response to the initial question on marital status because their relationships had not been formalized under either customary or common law. Therefore, two additional probes were

[1] Includes women married under either customary law or common law. For a detailed description of the two marriage systems, see Molokomme, n.d., pp. 33-63.

included to determine how many women reporting their "formal" marital status as separated, divorced, widowed or single were actually living with a partner at the time of the interview. In response to these probes, 41 percent of the women not initially reporting themselves as married or in a consensual union said that they were living with a partner. The proportion of these women indicating that they were living with a partner was greater among rural (44 percent) than urban (30 percent) women.

Using these data as well as the information on formal marital status, BFHS respondents are categorized in Table 4.2 into the following three union status groups:

- Currently in union - includes those women reporting themselves as formally married or living with a partner at the time of the survey
- Previously in union - includes those women reporting themselves as divorced, widowed, separated or having lived with a partner in the past who did not have a partner at the time of the survey
- Never in union - includes women reporting that they have never been married or lived with a partner.

This union status categorization will be used throughout the remainder of the report.

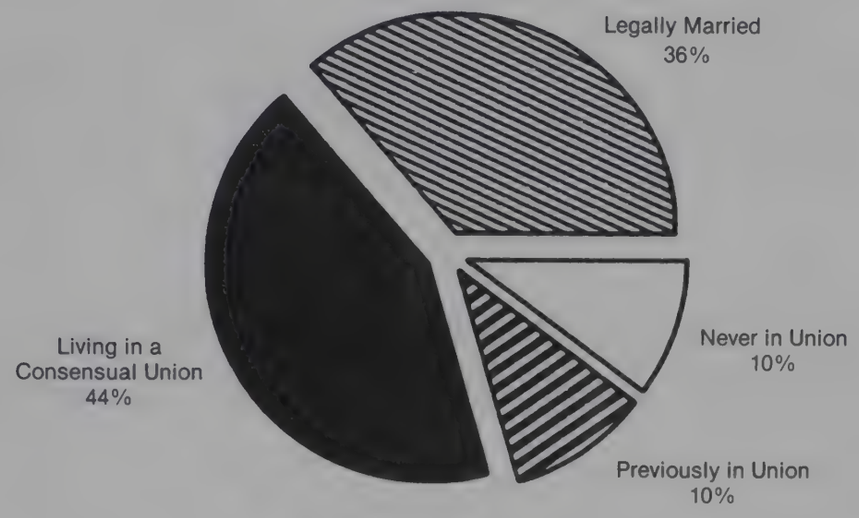
Table 4.2 suggests that around nine out of every ten women in the reproductive ages (15-49) in Botswana have ever been in a marital union and that eight out of ten women are currently in union. Women are more likely to be living together with a partner in a consensual than in a legal union; overall, 43 percent of all women are involved in consensual unions while 36 percent report that they are legally married. The percent of women currently in union is nearly identical in urban and rural areas. However, consensual unions are more common among urban than rural women (Figure 4.1). Two out of every three urban women currently in union report that they are involved in a consensual union compared to only one out of every two rural currently in union women.

TABLE 4.2

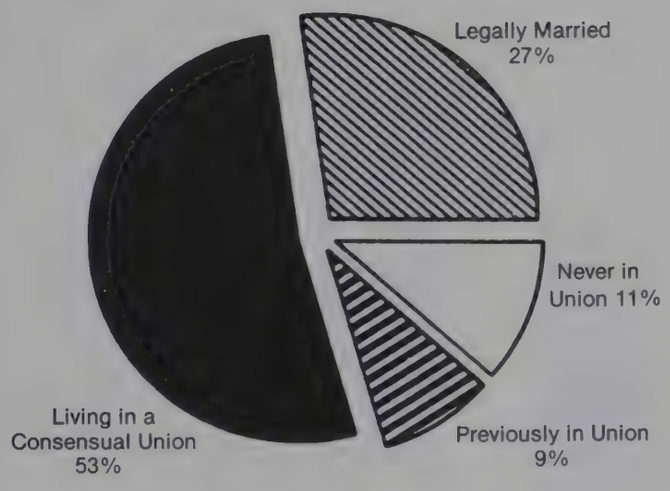
PERCENT DISTRIBUTION OF ALL WOMEN BY MARITAL UNION STATUS, AREA OF RESIDENCE AND AGE, BOTSWANA, 1984

Marital Union Status	Total	15-19 Years	20-24 Years	25-29 Years	30-34 Years	35-39 Years	40-44 Years	45-49 Years
Total								
Total Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Currently in union	79.4	46.9	84.2	87.8	89.7	88.8	91.0	83.1
Legally married	36.3	3.2	22.1	42.6	53.3	59.6	62.6	53.6
In a consensual union	43.1	43.7	62.1	45.2	36.4	29.2	28.4	29.5
Previously in union	10.4	6.2	11.9	11.7	10.0	11.1	9.0	16.9
Never in union	10.2	46.8	3.9	0.5	0.4	0.1	0.0	0.0
Urban								
Total Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Currently in union	79.6	52.8	86.3	88.1	89.1	90.5	86.7	87.5
Legally married	27.3	2.9	18.0	34.9	47.3	52.7	38.8	47.9
In a consensual union	52.3	49.9	68.3	53.2	41.8	37.8	47.9	39.6
Previously in union	9.0	5.1	8.7	11.0	10.9	8.7	13.3	12.5
Never in union	11.4	42.1	5.0	0.9	0.0	0.8	0.0	0.0
Rural								
Total Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Currently in union	79.3	44.6	83.5	87.7	89.9	88.5	91.8	82.5
Legally married	39.1	3.3	23.5	45.4	55.4	61.0	67.1	54.3
In a consensual union	40.2	41.3	60.0	42.3	34.5	27.5	24.7	28.2
Previously in union	10.9	6.7	13.0	11.9	9.6	11.5	8.2	17.5
Never in union	9.8	48.7	3.5	0.4	0.5	0.0	0.0	0.0

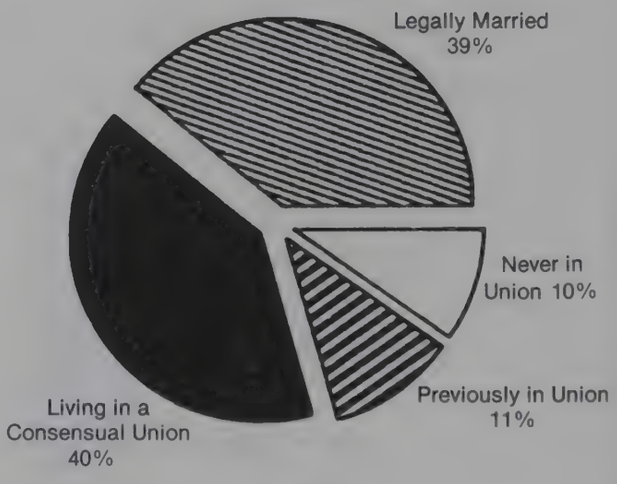
Figure 4.1
PERCENT DISTRIBUTION BY MARITAL UNION STATUS AND AREA OF RESIDENCE, BOTSWANA, 1984



Total



Urban



Rural

Marital union status clearly varies with age, with teenagers being considerably less likely than women 20 years and older to be currently in union. Urban teenagers are somewhat more likely to say that they are married or living with a partner than rural teenagers; 53 percent of women age 15-19 are currently in union compared to 45 percent of rural women in the 15-19 cohort. The proportion of women in legal and, thus, presumably more stable unions increases with age, ranging from only three percent among women age 15-19 to a high of 63 percent among women in the 40-44 age group.

One out of every two currently in union women said that her partner was not living with her at the time of the interview (Table 4.3). The

TABLE 4.3

PERCENT DISTRIBUTION OF CURRENTLY IN UNION WOMEN BY PARTNER'S RESIDENCE IN HOUSEHOLD AT TIME OF INTERVIEW, THE LENGTH OF TIME PARTNER HAS BEEN AWAY AND AREA OF RESIDENCE, BOTSWANA, 1984

	Total	Urban	Rural
Partner in Household			
Total Number	2,433	576	1,857
Total Percent	100.0	100.0	100.0
Partner living at home	50.2	61.2	46.8
Partner away	49.8	38.8	53.2
Length of Time Partner Away			
Total Number	1,210	223	987
Total Percent	100.0	100.0	100.0
Less than 1 month	34.8	45.5	32.4
1-3 months	30.9	24.8	32.2
4-6 months	16.1	15.5	16.3
7-12 months	10.0	7.9	10.5
13 months or more	5.8	5.3	6.0
Not stated	2.4	1.0	2.7

table also indicates that 35 percent of the women whose partners are away say that their partners have been away less than 1 month, 47 percent have been gone between 1 and 6 months and 16 percent report that their partners have been gone for more than 6 months. Figure 4.2 shows that urban women are less likely than rural women to say that their partners are away (39 percent vs. 53 percent, respectively). Moreover, an urban woman whose partner is away is less likely to report that he has been away for more than one month than a rural woman (54 percent vs. 65 percent, respectively).

The comparatively high proportion of women who are currently in union but whose partners were not living with them at the time of the interview

Figure 4.2
PERCENT OF CURRENTLY IN UNION WOMEN WHOSE PARTNERS ARE AWAY BY THE LENGTH OF TIME THE PARTNER HAS BEEN AWAY AND AREA OF RESIDENCE, BOTSWANA, 1984

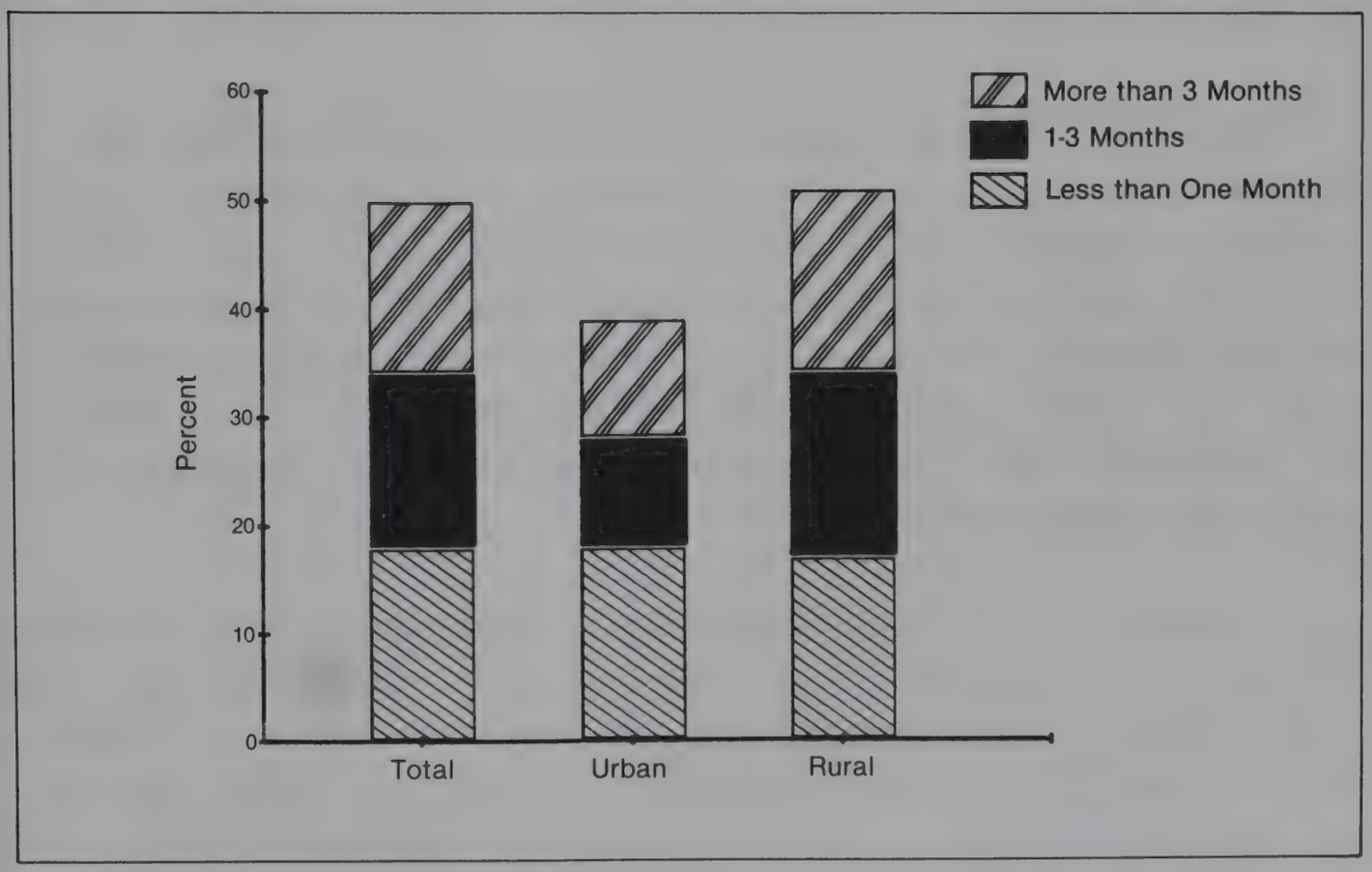


TABLE 4.4

PERCENT OF CURRENTLY IN UNION WOMEN WHOSE PARTNER IS AWAY BY TYPE OF UNION AND AREA OF RESIDENCE, BOTSWANA, 1984

Type of Union	Total	Urban	Rural
Total	49.8	38.8	53.2
Legally married	35.7	15.0	40.2
In a consensual union	61.6	51.1	65.8

may partially be attributed to the frequency of consensual unions, which are by nature more transitory than legal unions. Table 4.4 indicates that women who are involved in consensual unions are considerably more likely than those who are legally married to report their partners are away (62 percent vs. 36 percent). The differential between women in legal and consensual unions in the proportion reporting their partners are away is greater in urban than rural areas.

Employment conditions for males are another factor underlying the periods of separation, particularly in rural areas. Botswana has a long history of supplying male labor for mines in South Africa. Men working in mining communities in Botswana also are often away from their families for long periods. Finally, the agricultural patterns in which persons leave their villages at certain times of the year to work at the lands and cattleposts help to explain the fact that periods of separation are more common among rural than urban couples.

In summary, the key BFHS findings with regard to nuptiality in Botswana relate to the high proportion of consensual unions, especially among younger women, and to the prevalence of regular periods of separation from their partners among the majority of currently in union women. Both fertility and contraceptive behavior are obviously affected by these patterns.

4.2 AGE AT FIRST SEXUAL UNION

All ever in union respondents were asked how old they were when they first became sexually active. Table 4.5 shows that more than half of all ever in union women become sexually active for the first time before their 18th birthday and that only around one out of every six of ever in union women is 20 years or older when she first had intercourse. The distributions by the age at first sexual union are generally similar for urban and rural women although urban women are somewhat more likely than rural women to have become sexually active for the first time before their 18th birthday.

Table 4.6 examines whether there have been any recent changes in the age at which women in Botswana first become sexually active by looking at the patterns among women age 20-49 who had intercourse for the first time

TABLE 4.5

PERCENT DISTRIBUTION OF EVER IN UNION WOMEN BY AGE AT FIRST SEXUAL UNION AND AREA OF RESIDENCE, BOTSWANA, 1984

Age at First Sexual Union	Total	Urban	Rural
Total Number	2,753	641	2,112
Total Percent	100.0	100.0	100.0
Less than 15 years	10.9	10.7	11.0
15-17 years	44.4	48.3	43.1
18-19 years	22.7	24.0	22.3
20-21 years	9.6	9.1	9.8
22 years or more	6.3	4.6	6.8
Not stated	6.1	3.3	7.0
Mean	17.3	17.1	17.3
Median	17.0	16.8	17.0

TABLE 4.6

PERCENT DISTRIBUTION OF EVER IN UNION WOMEN AGE 20-49 WHO BECAME SEXUALLY ACTIVE BEFORE AGE 20 BY CURRENT AGE AND AGE AT FIRST SEXUAL UNION, BOTSWANA, 1984

Current Age	Total Percent	Age at First Sexual Union: Less than 15 years	15-17 years	18-19 years	Mean
Total	100.0	13.3	54.9	31.8	16.4
20-24 Years	100.0	15.4	54.0	30.6	16.3
25-29 Years	100.0	13.5	57.0	29.5	16.3
30-34 Years	100.0	11.4	55.6	33.0	16.5
35-39 Years	100.0	15.7	54.0	29.3	16.4
40-44 Years	100.0	8.4	49.3	42.3	16.9
45-49 Years	100.0	9.5	57.9	32.7	16.7

before age 20[1]. In general, the results suggest that the age at first sexual union in Botswana has not increased recently, and that, in fact, women in the 20-29 cohorts appear to have become sexually active at somewhat younger ages than older women, particularly those in the 40-49 age groups. However, any conclusion that the age at first sexual union has declined in recent years must be considered with caution. Older women are likely to have had problems recalling their age at the time when they first had intercourse, and, consequently, they may have had a greater tendency than younger respondents to overstate the age at which they first became sexually active. Older women also may have been more

[1] This subgroup was selected in order to control for the downward bias introduced in the average age at first sexual union by the fact that women in each age cohort who had not yet had intercourse are excluded from the analysis. The subgroup is homogeneous with respect to its exposure to the risk of intercourse, thus allowing trends in the age at first sexual union to be examined. A total of 1,837 ever in union respondents are included in the subgroup. Among the remaining women, 598 were less than 20 years old, 436 had become sexually active after age 20 and 169 did not provide information on their age at first sexual union.

likely to report the age at which they were first formally married or began living together with a partner rather then their age at the time that they first had intercourse, again upwardly biasing their responses.

In summary, although the precise trend in the age at first sexual union cannot be established based on the findings presented in Table 4.6, the results definitely indicate that changes in the age at first sexual union in Botswana have not been substantial enough to have a significant impact on the average duration of the reproductive period, and, thus, fertility levels. The average woman is around 16 years old when she first has intercourse, indicating the duration of the period in which she is potentially exposed to the risk of pregnancy may exceed 30 years.

4.3 CUMULATIVE FERTILITY

Data collected on the numbers of children ever born to BFHS respondents can be used to examine levels and patterns in cumulative fertility in Botswana. Before these results are presented, it must be cautioned that parity data are subject to a number of sources of error. The major source of bias relates to the omission of children born alive who later die. Although the data on children ever born in the BFHS were obtained by a series of questions designed to minimize the underreporting of such births, some omission may still have occurred, resulting in an underestimation of parity levels, particularly among older women who are more likely to fail to mention children who died.

4.3.1 Cumulative Fertility Levels

Fertility levels in Botswana are high; the average woman has had almost three births, and women in the 45-49 age group, who are nearing the end of the reproductive period, report that they have had, on average, around seven births. Table 4.7 compares the BFHS parity data with similar data

TABLE 4.7

MEAN NUMBER OF CHILDREN EVER BORN AMONG ALL WOMEN, 1984 BFHS AND 1981 CENSUS

	1984 BFHS	1981 Census[a]
Total	3.05	2.85
15-19 years	0.25	0.25
20-24 years	1.44	1.45
25-29 years	2.87	2.74
30-34 years	4.16	4.14
35-39 years	5.36	5.20
40-44 years	6.27	6.11
45-49 years	6.84	6.42

SOURCE: [a] Central Statistics Office, forthcoming.

from the 1981 census. The table indicates that, although there is general agreement between the survey and census results, there is some tendency for the mean parity reported for BFHS respondents to be higher than the comparable census figure, particularly for the 45-49 year cohort. The latter difference may be a result of better reporting of births by the BFHS respondents because of the more intensive probing that was possible in the survey compared to the census. It also may simply be due to sampling variability as a consequence of the small number of BFHS respondents in this cohort.

Table 4.8 looks at the distribution of women by the number of children ever born and age. It shows the proportion of childless women declines rapidly with age to a level of less than three percent among women 45-49 years old. This suggests that primary sterility, which is a problem in some African countries, has not been a major influence on fertility patterns in Botswana.

TABLE 4.8

PERCENT DISTRIBUTION OF ALL WOMEN BY AGE AND NUMBER OF CHILDREN EVER BORN, BOTSWANA, 1984

Age	Total Percent	Number of Children Ever Born									
		None	1	2	3	4	5	6	7	8	9 or more
Total	100.0	21.7	15.7	15.2	11.3	9.1	6.8	6.8	4.6	3.5	9.1
15-19 years	100.0	77.4	19.9	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20-24 years	100.0	20.4	34.7	29.4	12.1	2.7	0.5	0.2	0.0	0.0	0.0
25-29 years	100.0	4.7	13.7	24.8	27.8	14.6	8.8	4.0	0.4	0.8	0.6
30-34 years	100.0	2.9	5.3	10.6	15.2	23.4	19.8	13.7	5.5	2.6	1.1
35-39 years	100.0	2.8	3.4	10.0	7.4	12.3	11.7	19.5	15.8	8.5	8.8
40-44 years	100.0	3.6	5.1	8.1	3.8	7.1	8.4	11.1	14.8	13.1	24.8
45-49 years	100.0	2.8	1.1	6.5	4.7	9.4	4.9	14.6	10.4	14.1	31.6

The results presented in Tables 4.7 and 4.8 indicate that fertility levels among women in Botswana increase rapidly with age. For example, while the average woman age 20-24 has had 1.4 births, mean parity is double that level among women age 25-29 (2.9 births), and more than one out of four women in the latter cohort has had four or more births. Among women in the 30-34 cohort, average parity exceeds 4 births, and around one out of every five women has had six or more children. The mean number of children ever born among women age 35-39 is 5.4, and one out of two women has had six or more births. Among women in the 40-49 age group, the mean parity exceeds six births, and one out of every four women has had at least nine births.

Urban-rural differentials in mean parity are presented in Table 4.9. Overall, women in rural areas in Botswana have had, on average, one more birth than urban residents (3.3 births vs. 2.3 births, respectively). Figure 4.3 shows that urban-rural parity differentials increase rapidly

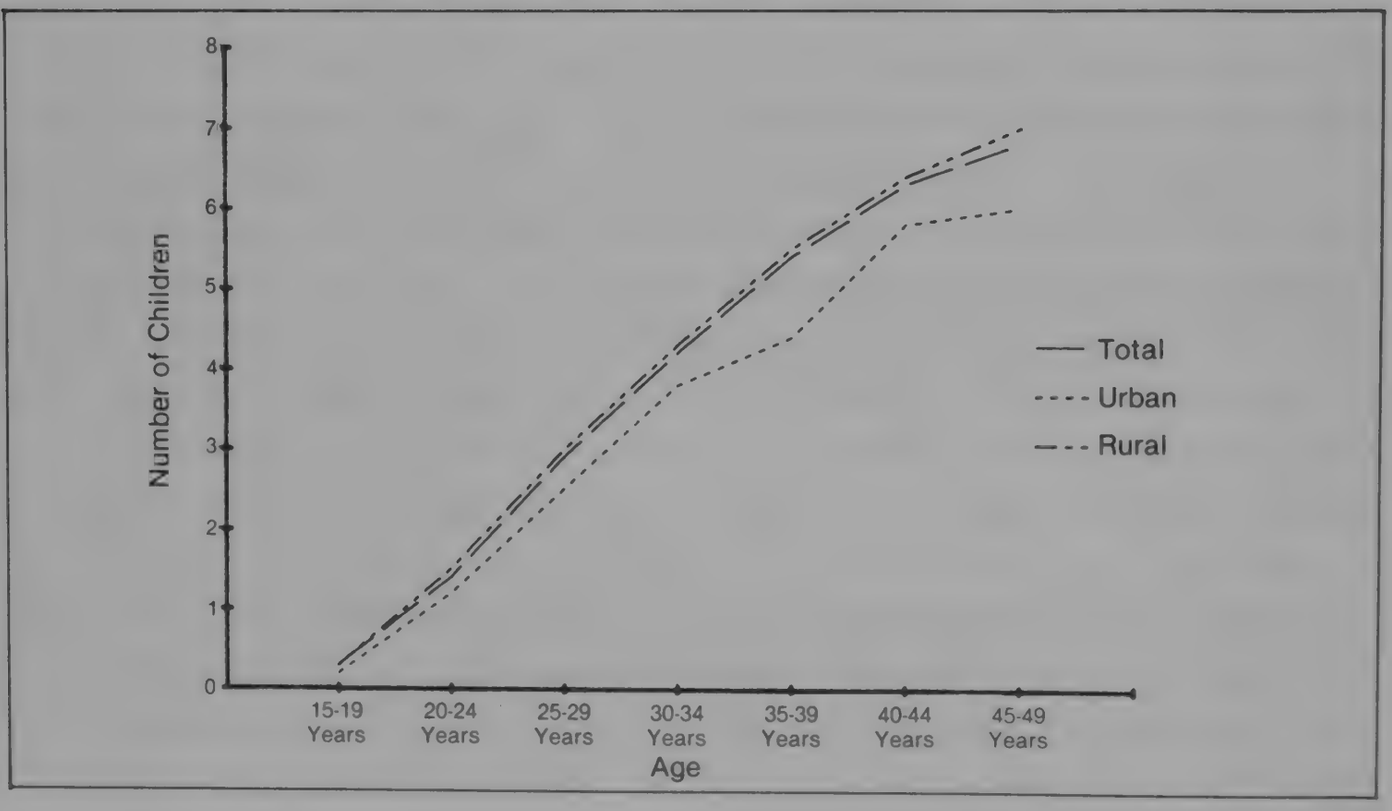
TABLE 4.9

MEAN NUMBER OF CHILDREN EVER BORN AMONG ALL WOMEN BY AGE AND AREA OF RESIDENCE, BOTSWANA, 1984

	Total	Urban	Rural
Total (Unst)	3.06	2.31	3.28
Total (Stand[a])	2.94	2.57	3.03
15-19 years	0.25	0.20	0.28
20-24 years	1.44	1.23	1.52
25-29 years	2.87	2.48	3.01
30-34 years	4.16	3.80	4.29
35-39 years	5.36	4.44	5.54
40-44 years	6.27	5.78	6.37
45-49 years	6.84	6.04	6.95

[a] Standardized for age using the distribution of women age 15-49 from the 1981 Botswana census as the standard.

Figure 4.3
MEAN NUMBER OF CHILDREN EVER BORN BY AGE AND AREA OF RESIDENCE, BOTSWANA, 1984



by age, ranging from less than 0.1 birth among women age 15-19 to almost one birth among women in the 45-49 cohort.

4.3.2 Differentials in Cumulative Fertility

Table 4.10 examines socio-economic differentials in mean parity. To control for age differences among the various population subgroups, the figures are standardized using the age distribution of the population of women age 15-49 from the 1981 Botswana census as the standard. The results suggest that a woman's educational status has a substantial impact on her fertility. Considering the unstandardized figures, mean parity varies from around a high of four births among women who never attended school or did not complete the primary level to a low of slightly more than one birth among women with at least some secondary schooling. After the means are standardized to control for the effect of age differences among the educational status groups, these differentials are lessened, but they still remain substantial.

With respect to the other socio-economic status differentials presented in Table 4.10, mean parity is slightly lower among literate than illiterate women. It is also slightly lower among women who work for pay than among women who do not work at a job for which they are paid in cash in kind. However, mean parity among women does not vary greatly by religious affiliation. When the age-standardized means are considered, average parity is highest among Catholic women (3.0 births) and lowest among those belonging to Spiritual/African denominations (2.8 births).

Among currently in union women, mean parity is negatively related to the educational status of a woman's partner. Looking at the educational status differentials in mean parity for both the women and their partners, it is important to note that the woman (or her partner) must complete at least the primary level before school attendance has a significant impact on a couple's fertility behavior.

TABLE 4.10

MEAN NUMBER OF CHILDREN EVER BORN (UNSTANDARDIZED AND STANDARDIZED[a]) AMONG ALL WOMEN BY SELECTED BACKGROUND CHARACTERISTICS AND AREA OF RESIDENCE, BOTSWANA, 1984

	Total		Urban		Rural	
	Unst	Stand	Unst	Stand	Unst	Stand
Total	3.06	2.94	2.31	2.57	3.28	3.03
Educational Status						
No education	3.86	3.07	3.06	2.66	3.99	3.12
Less than primary completed	4.10	3.10	3.57	2.86	4.23	3.16
Primary completed	1.89	2.65	1.65	2.41	1.99	2.78
Some secondary and above	1.33	2.21	1.41	1.96	1.28	2.52
Literacy Status						
Literate	2.64	2.89	2.08	2.55	2.87	3.02
Illiterate	3.85	3.06	3.23	2.90	3.94	3.08
Work Status						
Working	2.79	2.65	2.45	2.41	3.00	2.77
Not working	3.16	3.07	2.17	2.77	3.37	3.12
Religion						
Spiritual/African	2.84	2.85	2.34	2.60	3.03	2.92
Protestant	3.22	2.98	2.31	2.46	3.56	3.14
Catholic	2.98	3.04	2.28	2.49	3.22	3.24
Other	3.35	3.02	2.47	2.95	3.58	3.02
None	3.11	2.92	2.12	2.57	3.29	2.98
Educational Status (Partner)[b]						
No education	4.33	3.23	3.51	2.86	4.45	3.28
Less than primary completed	4.40	3.29	3.89	2.96	4.54	3.37
Completed primary	2.51	2.88	2.25	2.57	2.61	2.95
Some secondary and above	2.13	2.75	1.83	2.48	2.36	2.95

[a] Standardized for age using the distribution of women age 15–49 from the 1981 Botswana census as the standard.

[b] Refers only to currently in union women.

4.4 CURRENT FERTILITY

Respondents were asked about the dates of their last and next to the last (penultimate) live births. Data on the number of births in the 12 months preceding the survey derived from the responses to these questions are used in estimating current fertility levels in Botswana. As with the parity data, these results are subject to several sources of error. The major source of bias arises from errors in the reporting of the date of birth by the mother, particularly for children who are less than one month old and for children who are approaching or have just celebrated their first birthday. Another source of bias arises from the failure to report recent births who died during infancy. Overall, the BFHS data on recent births does not appear to be greatly affected by either of these sources of bias.

Respondents reported that they had had a total of 626 births in the 12 months prior to the survey; 111 births were to urban women and 515 births occurred among rural women. Overall, these figures suggest that about one out of every five women in Botswana gave birth during the year before the BFHS. Based on this information, the general fertility rate is estimated to be 204 births per 1,000 women. This rate is virtually the same as the rate---210 births per 1,000 women---derived from the 1981 census results (Central Statistics Office, 1984, p.3). The rate for urban areas---153 births per 1,000 women---is substantially lower than the rate for rural areas---220 births per 1,000 women.

Estimates of the age-specific and total fertility rates for Botswana, based on data from the census as well as the BFHS, are presented in Table 4.11. A comparison of the age-specific rates from the 1981 census and the BFHS indicates that the census rates are somewhat lower among younger cohorts (15-34 years) and somewhat higher among women in the oldest cohort (45-49 years) than the BFHS rates. The total fertility rate (TFR) derived from BFHS data is 6.5 births compared to the census estimate of 6.2 births. Both rates suggest that, if current fertility levels remain unchanged, the

TABLE 4.11

AGE SPECIFIC AND TOTAL FERTILITY RATES, 1984 BFHS AND 1981 CENSUS

Age	1984 BFHS*	1981 Census[a]
Total Fertility Rate	6.46	6.22
15-19 years	.113	.102
20-24 years	.288	.250
25-29 years	.265	.250
30-34 years	.237	.234
35-39 years	.192	.190
40-44 years	.140	.134
45-49 years	.056	.084

* Rates were adjusted for heaping.

SOURCE: [a] Central Statistics Office, 1983, Table 25.

average woman starting her reproductive period at this time will have more than 6 births before she reaches her 50th birthday.

4.5 FAMILY SIZE DESIRES

A series of questions were included in the BFHS to obtain information on a woman's family size desires. Respondents were first asked if they wanted to have more children. Women who had had at least one birth and who said that they did not want another child were asked whether they had wanted another child when they became pregnant the last time. Women who said they wanted more children were asked about when they would like to have their next child and how many more children they would like to have. A question also was directed to currently in union women regarding their partners' family size desires. The responses of currently in union women to these questions are presented in Tables 4.12 through 4.15.

4.5.1 Proportions Desiring to Limit Family Size or Space Births

Almost one-third of all currently in union women in Botswana do not want more children, and around one out of every two of these women (17 percent of all currently in union women) did not want another child before her last pregnancy (Table 4.12). Overall, the percentage of women wanting no more children is somewhat greater among rural than urban women (Figure 4.4). However, among those women wanting no more children, the proportion who did not want their last pregnancy is greater among urban than rural women.

TABLE 4.12

PERCENT DISTRIBUTION OF CURRENTLY IN UNION WOMEN BY THE DESIRE FOR CHILDREN AND AREA OF RESIDENCE, BOTSWANA, 1984

Desire for Children	Total	Urban	Rural
Total Number	2,433	576	1,857
Total Percent	100.0	100.0	100.0
Total desiring no more children	32.8	29.6	33.7
Wanted no more before last pregnancy	16.9	17.3	16.8
Want no more now	15.9	12.3	16.9
Total wanting more children	65.6	68.3	64.8
Within one year	11.5	11.2	11.6
Wait one year	13.2	12.3	13.4
Wait 2 or more years	21.3	24.0	20.6
Doesn't matter/whenever	12.1	13.3	11.7
Other	4.1	2.8	4.5
Not stated	3.4	4.7	3.0
Undecided about desire for children	1.6	2.1	1.5

Figure 4.4

PERCENT DISTRIBUTION OF CURRENTLY IN UNION WOMEN BY THE DESIRE FOR CHILDREN AND AREA OF RESIDENCE, BOTSWANA, 1984

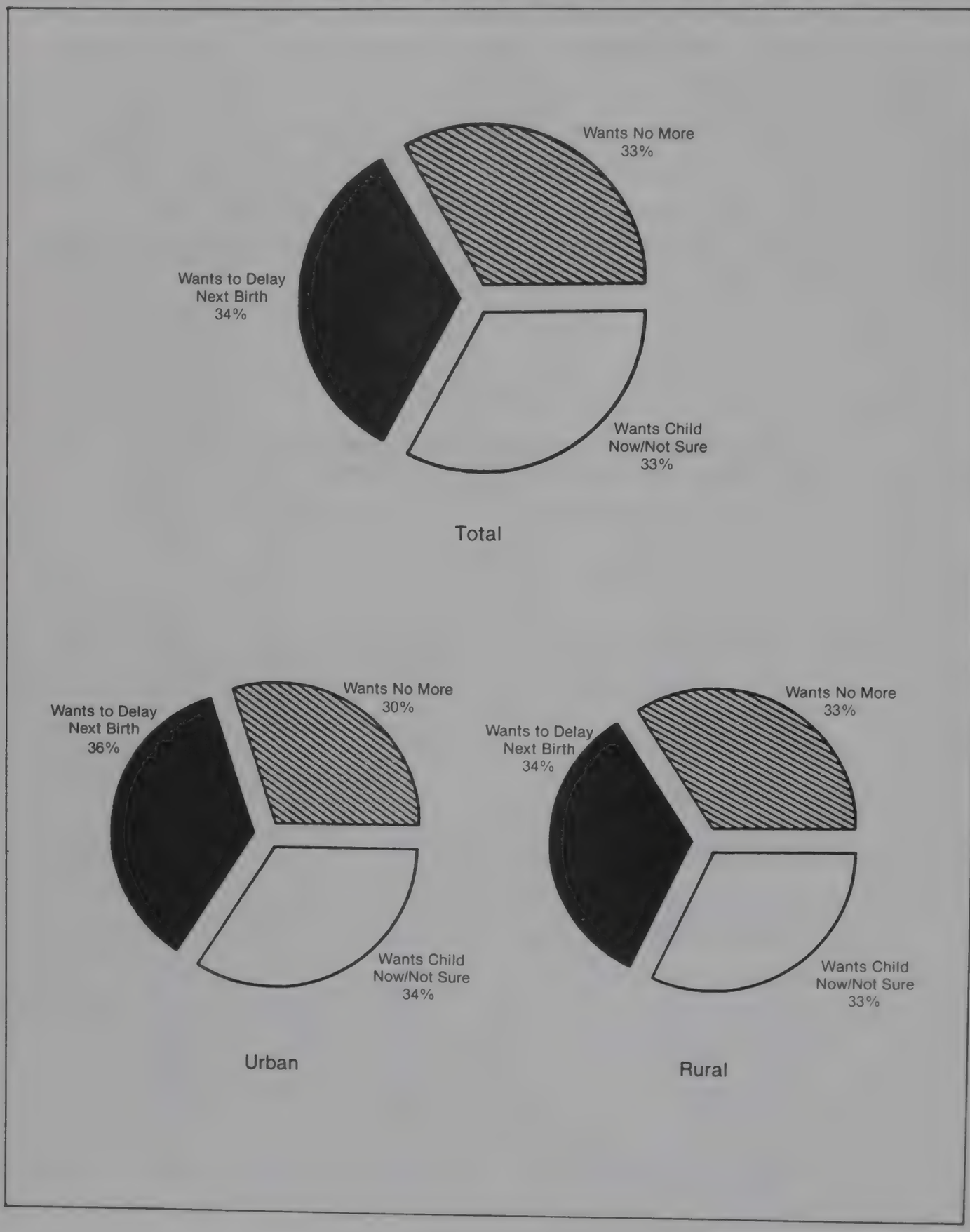


Table 4.13 indicates that the percent of women expressing a desire to limit the size of their families increases with age from 14 percent among women in the 15-19 cohort to over 70 percent of women age 45-49. The percent desiring no more children also varies directly with the number of living children, ranging from only four percent among women who have no children to 76 percent of mothers who have nine or more living children.

The importance of spacing births in order to protect the health of mothers and children is widely recognized in Botswana. The BFHS results

TABLE 4.13

PERCENT DESIRING NO MORE CHILDREN AND PERCENT DESIRING TO SPACE THE NEXT BIRTH AMONG CURRENTLY IN UNION WOMEN BY AGE AND NUMBER OF LIVING CHILDREN, BOTSWANA, 1984

Current Age	Desire to Limit	Desire to Space
Total Percent	32.8	34.5
Age		
15-19 years	13.6	53.0
20-24 years	18.9	45.2
25-29 years	23.5	40.4
30-34 years	37.1	31.4
35-39 years	47.3	21.9
40-44 years	55.5	13.4
45-49 years	71.1	9.4
Number of Living Children		
No children	3.9	42.3
1 child	15.1	46.2
2 children	24.2	42.6
3 children	29.7	35.5
4 children	40.1	30.4
5 children	40.5	31.6
6 children	54.4	23.3
7 children	57.3	20.4
8 children	64.4	22.5
9 children or more	76.2	8.0

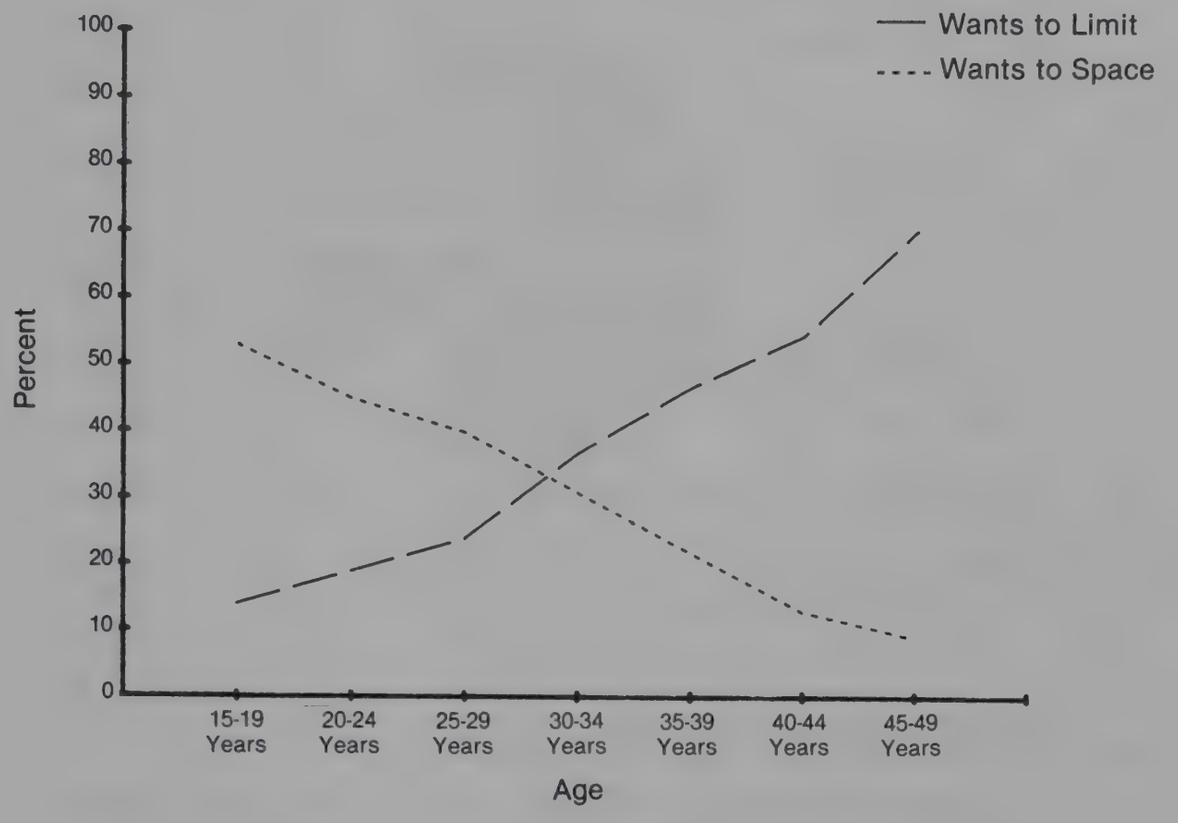
show that one out of every two women who wants another child (35 percent of all currently in union women) is interested in delaying her next birth for at least one year (Table 4.12). As expected, younger women and women with smaller families are considerably more likely to want to space their next birth than to limit their family size (Table 4.13). Overall, the percent wanting to delay their next birth varies inversely with age, from a high of 53 percent among women in the 15-19 age group to a low of 9 percent among women age 45-49. By family size, the percent wanting to wait at least one year before having another child ranges from 42 percent among women having no living children to 8 percent among women who have nine or more children.

These data provide an indication as to the point in her reproductive cycle at which a Botswana woman's interest will turn from a focus on spacing births to a desire to limit the size of her family. In this regard, Figure 4.5 shows the proportion of women desiring no more children first exceeds the proportion wanting to delay their next birth among women in the 30-34 age group and among women with four living children. The figure also shows that, among women over age 40 or with six or more children, the majority want to limit their family size. It is important that, as a woman's attitudes toward spacing or limiting births change, the practices which she adopts to help achieve her goals should also change.

4.5.2 Partner's Attitude

Currently in union respondents were also asked about their partners' family size desires. Table 4.14 shows that 60 percent of currently in union women think that their partners want at least another child, 23 percent believe their partners desire no additional children and 17 percent are not sure about their partners' attitudes. Considering the attitudes of both the woman and her partner, Figure 4.6 indicates that 66 percent of currently in union women have the same attitude as their

Figure 4.5
PERCENT OF CURRENTLY IN UNION WOMEN WANTING TO LIMIT OR TO SPACE BIRTHS BY AGE AND BY THE NUMBER OF SURVIVING CHILDREN, BOTSWANA, 1984



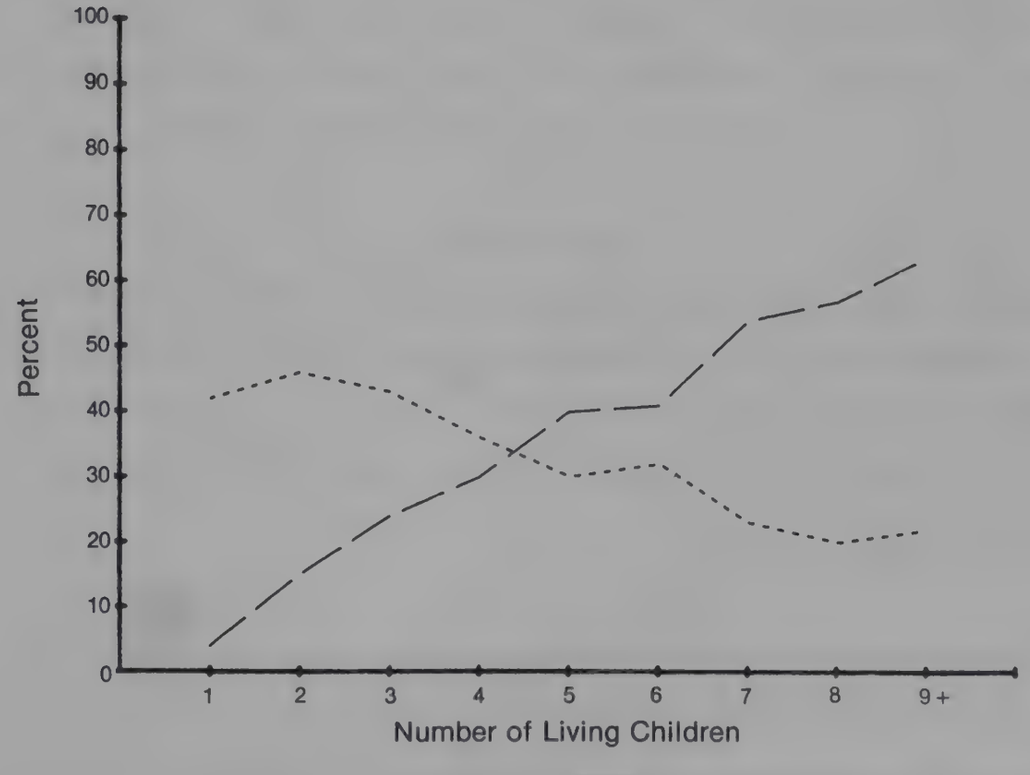


TABLE 4.14

PERCENT DISTRIBUTION OF CURRENTLY IN UNION WOMEN BY THE DESIRE OF THE WOMAN AND HER PARTNER FOR MORE CHILDREN AND AREA OF RESIDENCE, BOTSWANA, 1984

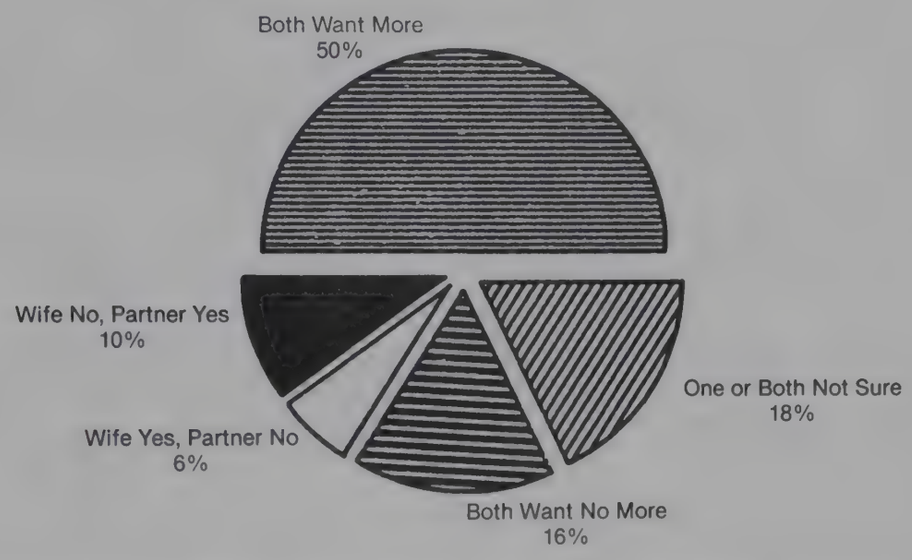
Desire for Children	Total	Urban	Rural
Total Number	2,433	576	1,857
Total Percent	100.0	100.0	100.0
Partner desires more	60.2	63.1	59.3
Wife desires more	49.5	52.8	48.5
Wife desires no more	10.3	9.6	10.5
Wife not sure	0.4	0.8	0.3
Partner desires no more	22.8	20.7	23.5
Wife desires more	6.3	5.4	6.6
Wife desires no more	16.3	15.1	16.7
Wife not sure	0.2	0.2	0.2
Partner's desires not known	16.9	16.2	17.2
Wife desires more	9.8	10.1	9.8
Wife desires no more	6.1	4.9	6.5
Wife not sure	1.0	1.2	0.9

partners, 10 percent want no more children while their partners still would like additional children and six percent want more children although their partners do not.

4.5.3 Mean Expected Family Size

Women who wanted more children were asked about the number of additional children desired. Adding the number of additional children a woman wants to the number of living children she currently has provides a

Figure 4.6
PERCENT DISTRIBUTION OF CURRENTLY IN UNION WOMEN BY THEIR PARTNERS' AND THEIR DESIRE FOR CHILDREN, BOTSWANA, 1984



measure of the completed family size she expects[1]. Table 4.15 indicates that the average woman in Botswana expects to have around six children at the end of her childbearing period. Comparing this average to the total fertility rate which is estimated to slightly exceed six children (see Table 4.11), it is evident that women's future fertility expectations closely parallel current fertility levels in Botswana.

Table 4.15 shows that urban women expect to have an average of five children while rural women want to have six children. The expected family size is also clearly influenced by the number of children that a woman already has; the average expected family size is lower among younger women with smaller families than among older, higher parity women (Figure 4.7).

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[1] For women wanting no more children, the expected completed family size is equal to the number of living children. Women who were undecided about the number of children they wanted or who did not know how many more children they wanted are excluded from this analysis.

TABLE 4.15

MEAN NUMBER OF SURVIVING CHILDREN AND MEAN EXPECTED FAMILY SIZE AMONG CURRENTLY IN UNION WOMEN BY AGE AND AREA OF RESIDENCE, BOTSWANA, 1984

Age	Total		Urban		Rural	
	Surviving Children	Expected Family Size	Surviving Children	Expected Family Size	Surviving Children	Expected Family Size
Total	3.1	5.9	2.4	5.1	3.3	6.2
15-19 years	0.5	3.9	0.3	3.9	0.5	3.9
20-24 years	1.4	5.2	1.2	4.6	1.5	5.4
25-29 years	2.7	5.8	2.4	5.2	2.9	6.0
30-34 years	3.9	6.6	3.4	5.5	4.0	7.0
35-39 years	4.7	6.8	4.2	5.9	4.8	7.0
40-44 years	5.6	7.3	5.2	6.3	5.6	7.5
45-49 years	6.0	6.9	5.2	6.0	6.0	7.0

Figure 4.7

MEAN NUMBER OF SURVIVING CHILDREN AND MEAN EXPECTED FAMILY SIZE AMONG CURRENTLY IN UNION WOMEN BY AGE, BOTSWANA, 1984

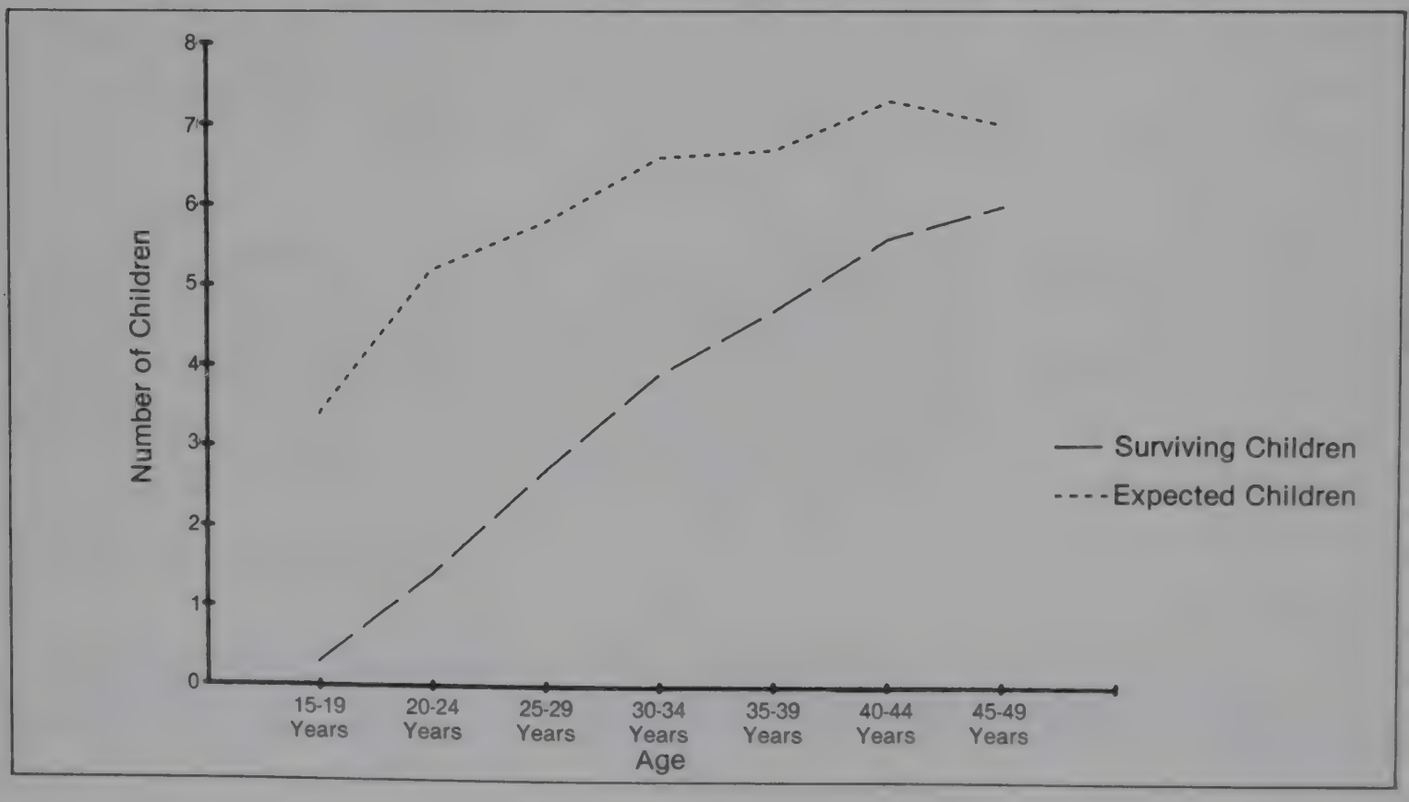


TABLE 4.16

PERCENT DISTRIBUTION OF ALL WOMEN BY THEIR ATTITUDE TOWARD THE SIZE OF THE POPULATION IN BOTSWANA AND AREA OF RESIDENCE, BOTSWANA, 1984

Attitude Toward Size of the Country's Population	Total	Urban	Rural
Total Number	3,064	723	2,341
Total Percent	100.0	100.0	100.0
Botswana has too many people	54.7	55.8	54.4
Botswana has just enough people	8.3	9.3	8.0
Botswana has too few people	23.2	22.9	23.3
Not sure	13.7	12.0	14.3

Overall, the average expected family size varies from less than four children among women in the 15-19 cohort to seven children among women in the 45-49 age group. It is especially noteworthy that women age 35-39, who already have on average almost five living children, indicate that they want an average of two additional children.

4.6 ATTITUDES TOWARD BOTSWANA'S POPULATION

To obtain some insight into whether women considered population growth to be a problem or not, respondents were asked whether they thought there were too many people, just enough people or too few people in Botswana. Table 4.16 shows that more than one out of every two women thinks that the country has too many people, about one out of every ten women is satisfied with the size of the country's population and about one out of every four women thinks that the population should be larger. The proportions holding these attitudes are very similar in both urban and rural areas.

Chapter 5
BREASTFEEDING AND POSTPARTUM ABSTINENCE

SUMMARY: In addition to protecting the health of the mother and child in the period immediately following birth, the traditional practices of breastfeeding and postpartum abstinence serve to increase the average interval between births and, thus, reduce fertility below the levels that would otherwise prevail. The BFHS showed that almost all mothers in Botswana breastfeed their babies, with the average (median) duration of breastfeeding being 19 months. Shorter than average breastfeeding durations are observed for women in urban areas, women age 15-24 and women with at least some secondary education, but even among mothers in these categories the median duration of breastfeeding exceeds 15 months.

Observance of traditional postpartum sexual taboos also appears to be common in Botswana, and the average woman does not resume sexual relations with her partner until a year after the birth of a child. The duration of the period of postpartum abstinence is considerably longer among rural than urban couples.

In spite of many recognized benefits of breastfeeding, such as its antiinfective properties, superior nutritional qualities, contribution to fertility regulation and function in mother-child bonding, this practice is declining in many developing countries, particularly in urban areas. In Botswana, breast-feeding is widely practiced; however, no baseline data is available in order to monitor trends. Several questions were included in the BFHS to establish this baseline for both urban and rural areas. In addition, information was collected on the practice of postpartum abstinence. This chapter examines these data.

5.1 BREASTFEEDING

5.1.1 Traditional Breastfeeding Patterns

As in other sub-Saharan African countries, breastfeeding is traditionally practiced in Botswana. A child is usually breastfed until the age of about two to three years (Alverson, 1978 and National Health

Institute, 1983a). Infants are fully breastfed until a certain developmental sign, such as teething, indicates that supplementation should begin (National Health Institute, 1983c); thus, solid foods are usually first given when the infant is six to seven months old.

Breastfeeding effects child spacing in two ways. The first is a physiological phenomenon. The sucking stimulus provided by the infant stimulates the release of prolactin and other hormones in the mother which inhibit ovulation. Thus, the period of postpartum amenorrhea can be extended by breastfeeding from two to three months up to as much as eighteen months. The effect of breastfeeding on the length of postpartum amenorrhea is greatest for breastfeeding durations of ten to twenty months (Lesthaeghe and Page, 1980).

A second but equally important effect of lactation on child spacing is a cultural one. In Botswana, as in most other sub-Saharan countries, breastfeeding is traditionally associated with various sexual taboos. For example, sexual abstinence is observed by nursing mothers in the Ngwato tribe for as long as two years; the father moves away to the cattlepost until the child is no longer breastfeeding (National Institute of Health, 1983b). Other groups such as the Bakgatla, where coitus interruptus is practiced as long as two to three years until a child is no longer nursing (Schapera, 1970, p.154), have less stringent taboos. Among almost all the population, traditional practices protect the nursing mother from becoming pregnant before she and her baby are strong enough to survive the consequences.

By lengthening the interval between births, breastfeeding can contribute to an overall decrease in the number of children a woman may have. Studies have shown that lactation is responsible for a reduction of as much as 25 percent of expected births in some countries (Kleinman and Senanyake, 1984, p.19). Until contraceptive prevalence rates in Botswana reach levels comparable with developed countries, breastfeeding with its accompanying contraceptive practices remains one of the most

important variables affecting birth intervals and, thus, indirectly, fertility levels.

5.1.2 Life Table Analysis of Breastfeeding Duration

Because of the effects of breastfeeding on infant health and maternal fertility, the BFHS investigated the prevalence, duration and pattern of breastfeeding. All women who reported having a live birth within the 36 months prior to the interview were asked if they were currently breastfeeding or had ever breastfed their last child, how frequently they nursed the child, and how long they had breastfed if the child was no longer nursing.

Using life table techniques and the data on breastfeeding status and duration, it is possible to estimate the probability that a woman would still be breastfeeding her last born child for each successive month since its birth. In interpreting the results, the following sources of bias must be kept in mind:

- Bias is introduced by the fact that the data refer to only the most recent birth within the 36 months prior to the survey and do not include all births within that period (i.e., it includes only one birth for each woman even though there may have been more). The resulting effect is to increase somewhat the estimated duration of breastfeeding since breastfeeding episodes for children born within the last three years who have been followed by a subsequent birth are excluded. These children are likely to have experienced shorter than average breastfeeding.

- Although an effort was made to minimize recall problems through limiting breastfeeding questions to those who had a live birth within three years of the BFHS interview, the respondents' recall may not have been accurate. As a consequence, the reported durations of breastfeeding may have been rounded to intervals of 3, 6, 12, 18 or 24 months. The extent of such heaping does not appear to be severe in this survey; only 31 percent of respondents reported that they had been breastfeeding for exactly 3, 6, 12, 18 or 24 months.

The BFHS results confirm that breastfeeding is almost universal among mothers in Botswana; 98 percent of the women whose last live birth occurred in the three years prior to the survey had breastfed that child. Average breastfeeding durations are, moreover, lengthy in Botswana. The national median duration of breastfeeding is 18.9 months (Table 5.1).

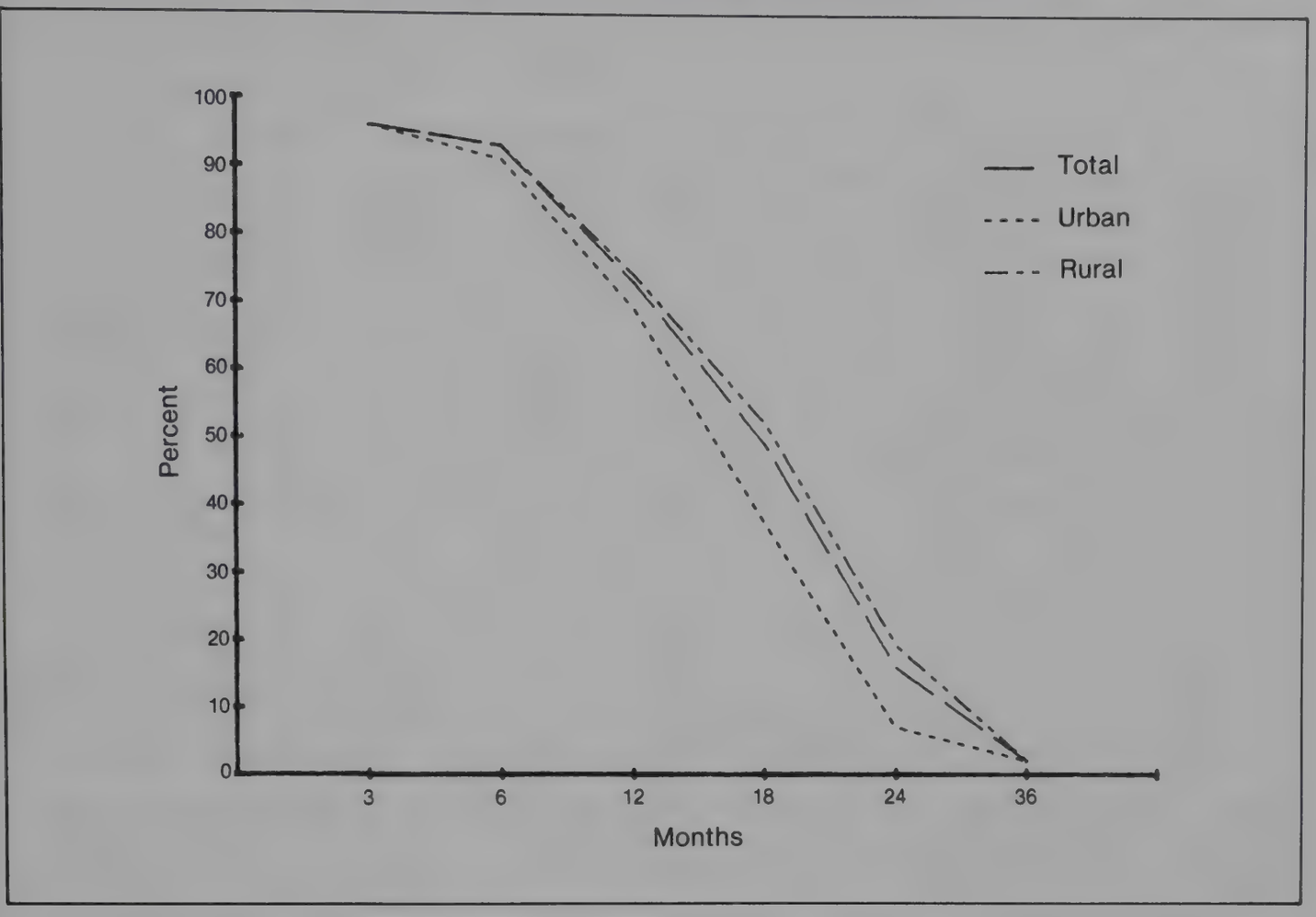
TABLE 5.1

MEDIAN DURATION OF BREASTFEEDING AND PROPORTION BREASTFEEDING AT LEAST 3, 6, 12, 18 AND 24 MONTHS DERIVED BY LIFE TABLE TECHNIQUES AMONG BREASTFEEDING MOTHERS WHOSE LAST BIRTH OCCURRED DURING THE 36 MONTHS PRIOR TO THE BFHS, BY AREA OF RESIDENCE, BOTSWANA, 1984

	Total	Urban	Rural
Total number	1,494	281	1,213
Median duration	18.9	17.6	20.2
Proportion breastfeeding at least:			
3 months	0.96	0.96	0.96
6 months	0.93	0.91	0.93
12 months	0.73	0.69	0.74
18 months	0.49	0.37	0.53
24 months	0.16	0.07	0.19

Figure 5.1 graphically portrays the estimated probability that a woman who breastfeeds her child will still be nursing her last born at various intervals. Overall, nine out of ten women will breastfeed for at least six months, almost three out of four women will still be breastfeeding after 12 months and one out of every two women will breastfeed for at least 18 months. The prevalence of breastfeeding decreases rapidly, however, after a child is 18 months old, and only about one out of every six mothers will still be breastfeeding after a child's second birthday.

Figure 5.1
PERCENT STILL BREASTFEEDING AT SPECIFIED INTERVALS AMONG WOMEN WHOSE LAST LIVE BIRTH OCCURRED WITHIN 36 MONTHS OF THE BFHS BY AREA OF RESIDENCE, BOTSWANA, 1984



As expected, the prevalence, duration and pattern of breastfeeding varies with urban and rural women. The prevalence of breastfeeding drops more quickly after 12 months in urban areas than in rural ones. Overall, the median duration of breastfeeding among urban mothers is 17.6 months, almost three months shorter than the duration for rural mothers (20.2 months). With regard to the pattern of breastfeeding, most mothers appear to breastfeed on demand (Table 5.2). Around nine out of ten mothers in both urban and rural areas breastfed their babies at least 12 times in a 24 hour period.

TABLE 5.2

PERCENT DISTRIBUTION OF ALL WOMEN BREASTFEEDING AT THE TIME OF THE INTERVIEW BY THE NUMBER OF TIMES THE CHILD IS BREASTFED DURING A 24 HOUR PERIOD AND AREA OF RESIDENCE, BOTSWANA, 1984

Number of Times Child Breastfed	Total	Urban	Rural
Total number	857	139	737
Total percent	100.0	100.0	100.0
1-3 times	4.0	4.6	3.9
4-6 times	4.5	2.3	5.0
7-12 times	2.2	2.3	2.2
More than 12 times	89.3	90.8	89.0

Table 5.3 relates breastfeeding to selected background characteristics of the respondents. With respect to age patterns, the results indicate that, although older and younger women initiate breastfeeding at almost equal rates, women under age 35 years tend to nurse for a shorter period of time than women 35 years and older (Figure 5.2). The median duration of breastfeeding among women in the 35-49 age group is 24 months compared to 19 months among women age 25-34 years and 18 months among women age 15-24 years. One of the main reasons for discontinuing breastfeeding is a new pregnancy, and, as older women tend to have longer intervals between pregnancies due to biological and behavioral changes, they would be likely to nurse for longer periods. Also older women tend to be more culturally resistant to change and, thus, one would expect a longer duration of breastfeeding among them.

Differentials between educational status groups are clearcut with better educated women being likely to breastfeed for shorter durations than other women. The median duration of breastfeeding varies from a low

TABLE 5.3

MEDIAN DURATION OF BREASTFEEDING AND PROPORTION BREASTFEEDING AT LEAST 3, 6, 12, 18 AND 24 MONTHS DERIVED BY LIFE TABLE TECHNIQUES AMONG ALL WOMEN WHOSE LAST BIRTH OCCURRED DURING THE 36 MONTHS PRIOR TO THE BFHS BY AGE, EDUCATIONAL STATUS AND WORK STATUS, BOTSWANA, 1984

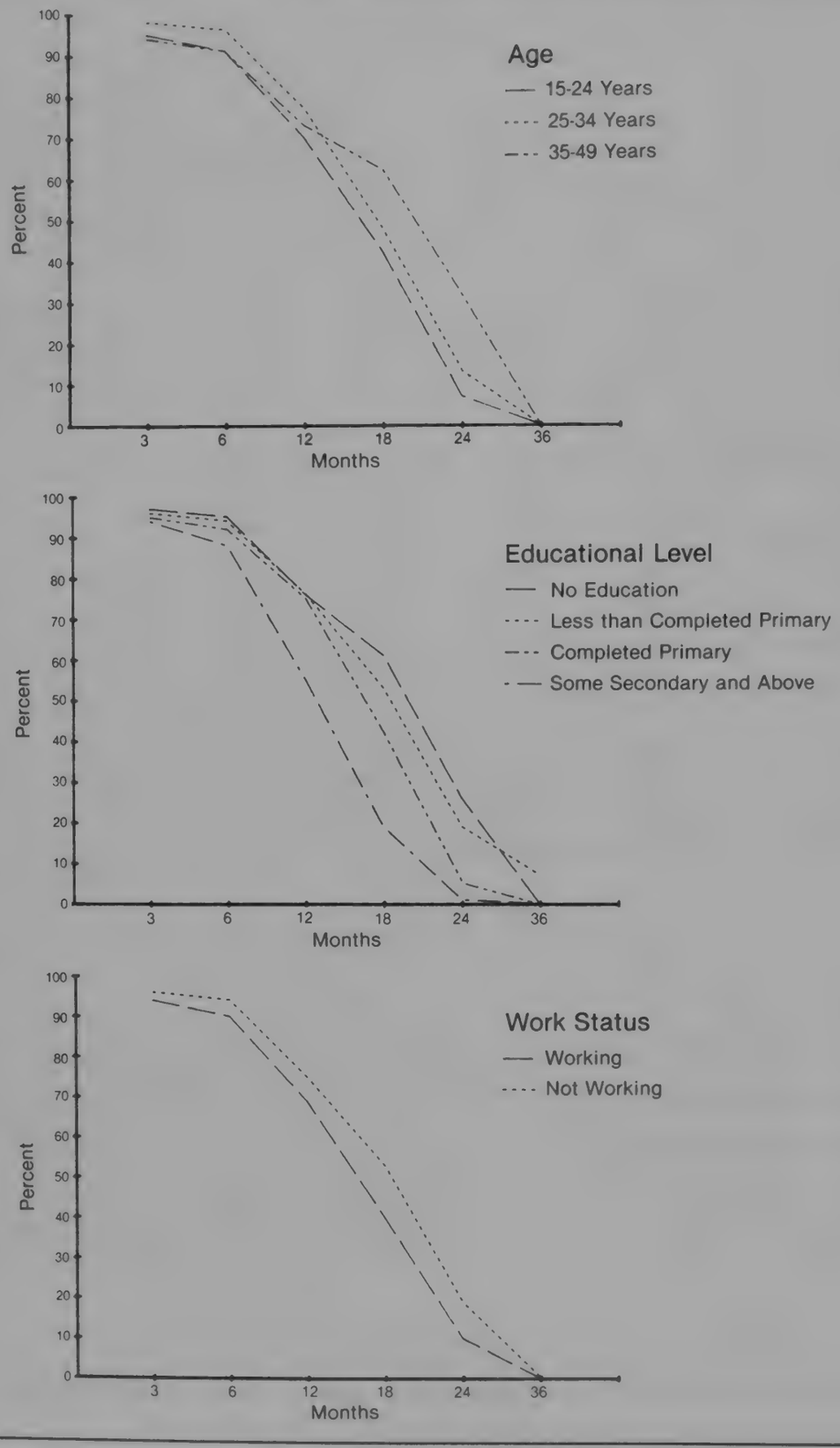
Characteristic	Total Number	Median Duration (Months)	Proportion Breastfeeding at Least 3 mos	6 mos	12 mos	18 mos	24 mos
Current Age							
15-24 years	566	17.9	0.95	0.91	0.70	0.41	0.07
25-34 years	596	18.8	0.98	0.96	0.77	0.48	0.13
35-49 years	332	24.2	0.94	0.91	0.73	0.62	0.32
Educational Status (Respondent)							
No education	510	24.2	0.97	0.94	0.76	0.61	0.26
Less than primary completed	445	20.1	0.96	0.94	0.76	0.53	0.19
Completed primary	358	18.4	0.95	0.92	0.75	0.42	0.05
Some secondary or more	181	15.0	0.94	0.88	0.55	0.19	0.01
Work Status							
Working	394	18.2	0.94	0.90	0.69	0.40	0.10
Not working	1,100	20.2	0.96	0.94	0.75	0.53	0.19

of 15 months among women with some secondary education to 24 months among women with no education. The prevalence of breastfeeding drops off sharply among women in the former category after 12 months while, among women in the other three educational status categories, differentials in the prevalence of breastfeeding become significant only after 18 months (Figure 5.2).

Table 5.3 indicates that the differentials between working and nonworking women also become especially evident at 12 months and later

Figure 5.2

PERCENT STILL BREASTFEEDING AT SPECIFIED INTERVALS AMONG WOMEN WHOSE LAST LIVE BIRTH OCCURRED WITHIN 36 MONTHS OF THE BFHS BY AGE, EDUCATIONAL LEVEL AND WORK STATUS, BOTSWANA, 1984



(Figure 5.2). Overall, working women report a median duration of breastfeeding of 18 months compared to 20 months among women who are not employed. The Botswana government supports nursing mothers by allowing time off for breastfeeding until their child's first birthday. It is not unusual to go to a government office such as the post office window and see a sign, "Temporarily closed for breastfeeding".

5.1.3 Breastfeeding and Postpartum Amenorrhea

As discussed above, by extending the period of postpartum amenorrhea, breastfeeding may have a significant effect on the spacing of births. Table 5.4 looks at the percent of women with a last birth during the 36 month period before the BFHS who reported that menstruation had not yet resumed since the birth of their last child. Overall, about one out of every four of these

TABLE 5.4

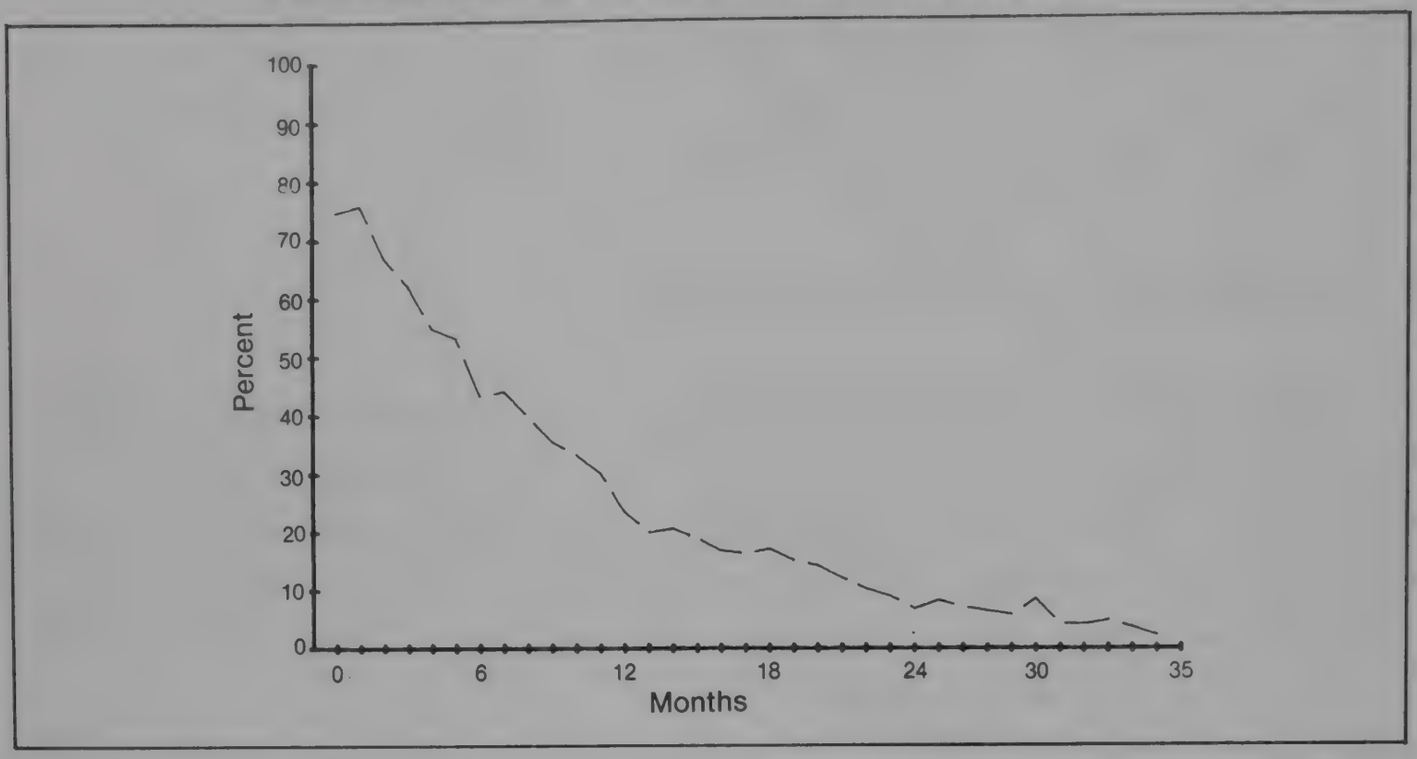
PERCENT AMENORRHEIC AMONG WOMEN WHOSE LAST BIRTH OCCURRED DURING THE 36 MONTHS PRIOR TO THE BFHS BY THE NUMBER OF MONTHS SINCE THE LAST BIRTH AND BREASTFEEDING STATUS, BOTSWANA, 1984

Period Since Birth	Total	Currently Breastfeeding	Not Currently Breastfeeding
Total	25.6	40.6	5.1
0-3 months	65.7	68.2	0.0*
4-6 months	45.1	48.3	14.1*
7-9 months	43.9	47.7	11.3*
10-12 months	25.3	27.9	0.0*
13-18 months	18.5	22.0	10.0
19-24 months	10.2	24.7	5.2
25-36 months	5.2	23.3	3.2

* Fewer than 25 women.

Figure 5.3

PERCENT AMENORRHEIC AMONG WOMEN WHOSE LAST LIVE BIRTH OCCURRED WITHIN 36 MONTHS OF THE BFHS BY THE NUMBER OF MONTHS SINCE THE BIRTH, BOTSWANA, 1984



mothers indicates that she was amenorrheic. The proportion amenorrheic declines as the number of months since the last birth increases, from 66 percent among those women for whom the interval since the last birth is three months or less to only 5 percent of mothers whose last child is more than two years old (Figure 5.3).

The comparatively small numbers of mothers in Botswana who stop breastfeeding before a child's first birthday make it difficult to draw conclusions with regard to the relationship between the breastfeeding status and proportion amenorrheic where the interval since the last birth is less than one year. However, among women whose last child is at least one year old, those who are still breastfeeding are much more likely than those who are not to be amenorrheic. For example, the proportion amenorrheic among breastfeeding mothers whose last birth occurred within 13-18 months of the BFHS was almost twice that for nonbreastfeeding

mothers with the same birth interval (22 percent vs. 10 percent, respectively). The differences in the proportion amenorrheic among mothers who are breastfeeding and those who are not are even greater among women whose last child is more than 18 months old.

5.2 POSTPARTUM ABSTINENCE

As discussed above, postpartum sexual taboos are common among ethnic groups in Botswana. A primary purpose of these taboos is to protect the health of the mother and her child. For example, the custom of "botseti," in which a new mother is required to stay apart from her partner and other members of the household in a special confinement room for 4-6 months, is believed necessary to ensure normal growth of the child and recovery of the mother after birth (Gabosianelwe and Dean, 1984). A mother who resumes sexual relations before a baby is weaned may be censured for endangering the child's health and development. Thus, among the Kalanga, "babies who delay walking are said to be due to the fact that the mother started sexual relations before the baby's age of walking" (National Health Institute, 1983).

5.2.1 Prevalence of Postpartum Abstinence

In order to obtain information on the prevalence of postpartum abstinence, women who had their last birth during the 36 months prior to the BFHS interview were asked if they had resumed sexual relations with their partners. The results confirm that sexual abstinence during the postpartum period is a very common practice in Botswana, particularly among breastfeeding mothers. Table 5.5 shows that 44 percent of currently in union women whose last child is less than three years old have not resumed sexual relations with their partner since the birth of that child. The prevalence of postpartum abstinence varies from 94 percent among mothers for whom the interval since birth is less than three months to 18

TABLE 5.5

PERCENT NOT YET RESUMED SEXUAL RELATIONS WITH THEIR PARTNERS AMONG CURRENTLY IN UNION WOMEN WHOSE LAST BIRTH OCCURRED DURING THE 36 MONTHS PRIOR TO THE BFHS BY THE NUMBER OF MONTHS SINCE THE LAST BIRTH AND BREASTFEEDING STATUS, BOTSWANA, 1984

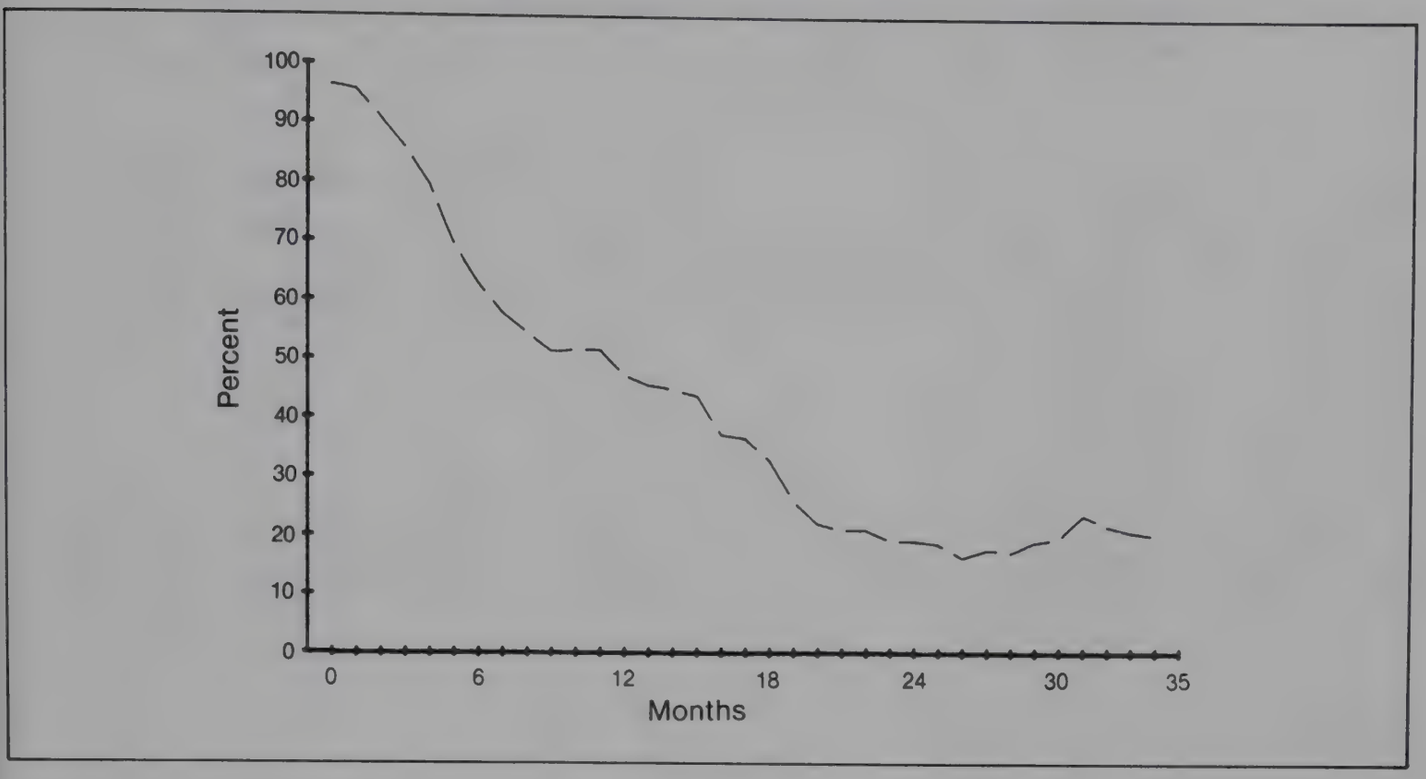
Period Since Birth	Total	Currently Breastfeeding	Not Currently Breastfeeding
Total	43.8	61.6	22.1
0-3 months	94.4	95.8	18.2*
4-6 months	69.9	72.9	39.1*
7-9 months	51.8	52.8	45.5*
10-12 months	50.1	51.7	36.2*
13-18 months	40.0	48.4	21.8
19-24 months	22.3	32.4	19.0
25-36 months	18.0	38.1	16.2

* Fewer than 25 women.

percent of mothers whose last child is at least two years old (Figure 5.4). The median period of abstinence appears to be about one year.

Breastfeeding status is closely associated with the practice of postpartum abstinence. Three out of every five mothers who are still breastfeeding report that they have not resumed sexual relations with their partners compared to around one out of every five mothers who has fully weaned her baby. Moreover, the prevalence of postpartum abstinence is greater at every birth interval among mothers who are still breastfeeding compared to those who have already weaned their last child (Table 5.5). The differentials in the proportion who have not resumed sexual relations with their partners are especially great in the case of mothers whose birth occurred more than 12 months before the survey. For example, among women whose last birth occurred 13-18 months before the BFHS, the

Figure 5.4
PERCENT NOT YET RESUMED SEXUAL RELATIONS AMONG WOMEN WHOSE LAST BIRTH OCCURRED WITHIN 36 MONTHS OF THE BFHS BY THE NUMBER OF MONTHS SINCE THE BIRTH, BOTSWANA, 1984



percentage of breastfeeding mothers practicing abstinence (48 percent) is more than double that among non-breastfeeding mothers (22 percent).

Table 5.6 shows that the percentage of women who have not yet resumed sexual relations is, not surprisingly, greater among women whose partners are away than among those whose partners are living at home (52 percent vs. 35 percent, respectively). However, controlling for the duration of the postpartum period, it appears that, whether or not their partners are in the household, most women do not resume sexual relations until their babies are at least three months old (Figure 5.5). Moreover, two out of every three mothers continue to practice abstinence until their babies are six months old whether their partners are living at home or not. Among women for whom the postpartum period is greater than six months, however, the percentage reporting that they resumed sexual relations is

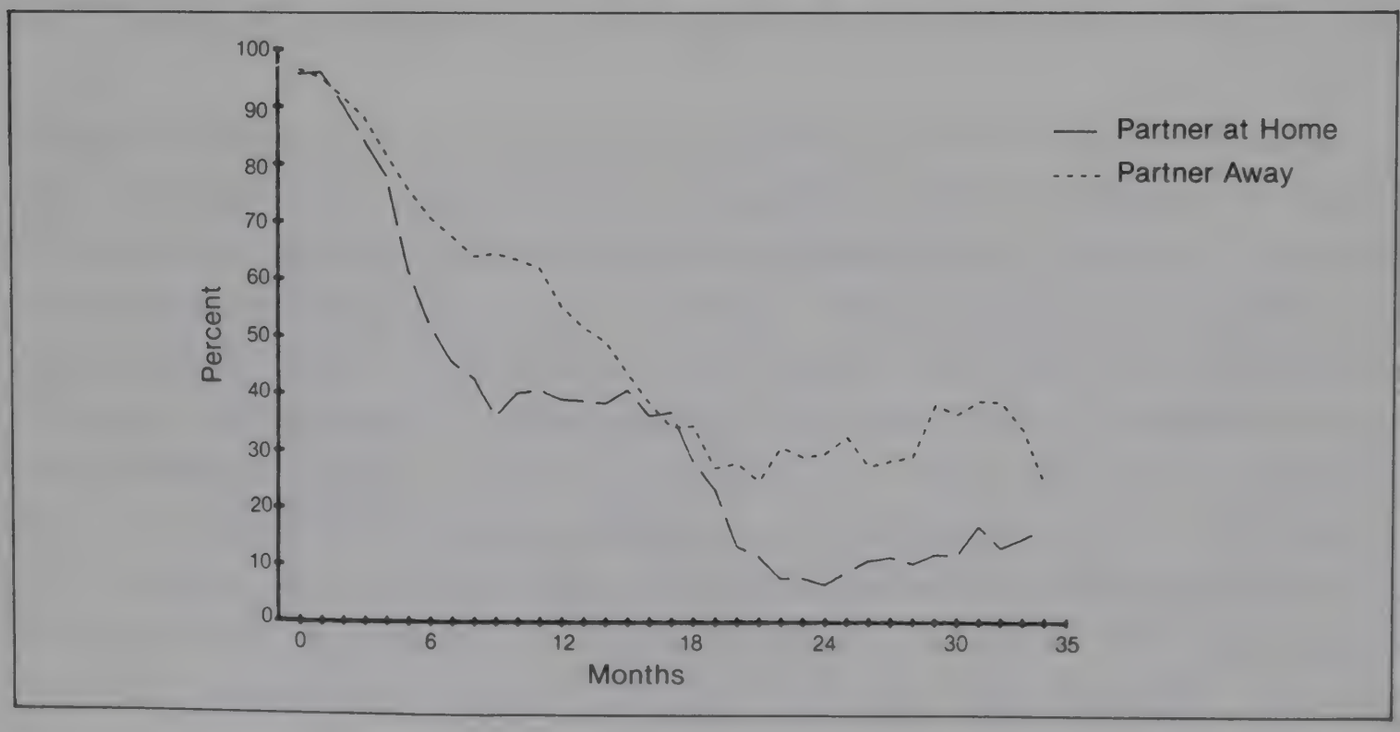
TABLE 5.6

PERCENT NOT YET RESUMED SEXUAL RELATIONS WITH THEIR PARTNERS AMONG CURRENTLY IN UNION WOMEN WHOSE LAST BIRTH OCCURRED DURING THE 36 MONTHS PRIOR TO THE BFHS BY THE PRESENCE OR ABSENCE OF THE PARTNER IN THE HOUSEHOLD AND THE NUMBER OF MONTHS SINCE THE LAST BIRTH, BOTSWANA, 1984

Period Since Birth	Total	Partner Living at Home	Partner Away
Total	43.8	35.2	52.5
0-3 months	94.4	91.3	96.2
4-6 months	69.9	67.9	72.1
7-9 months	51.8	35.5	67.5
10-12 months	50.1	41.2	61.4
13-18 months	40.0	35.7	44.2
19-24 months	22.3	15.9	28.6
25-36 months	18.0	11.0	27.0

Figure 5.5

PERCENT NOT YET RESUMED SEXUAL RELATIONS AMONG WOMEN WHOSE LAST BIRTH OCCURRED WITHIN 36 MONTHS OF THE BFHS BY THE NUMBER OF MONTHS SINCE THE BIRTH AND PARTNER'S RESIDENCE STATUS, BOTSWANA, 1984



clearly greater among women whose partners are living at home than among those whose partners are away. Unfortunately, it is not possible to determine in the latter cases whether a woman's partner was away because it is customary during the postpartum period, for employment reasons or as a result of a combination of these factors.

Table 5.7 examines the variation in the prevalence of postpartum abstinence with selected socio-demographic characteristics. The table shows that the prevalence of postpartum abstinence is more widespread in rural

TABLE 5.7

PERCENT NOT YET RESUMED SEXUAL RELATIONS WITH THEIR PARTNERS AMONG CURRENTLY IN UNION WOMEN WHOSE LAST BIRTH OCCURRED DURING THE 36 MONTHS PRIOR TO THE BFHS BY SELECTED BACKGROUND CHARACTERISTICS AND THE NUMBER OF MONTHS SINCE THE LAST BIRTH, BOTSWANA, 1984

Characteristic	Total	Period Since Birth						
		0-3 mos	4-6 mos	7-9 mos	10-12 mos	13-18 mos	19-24 mos	25-36 mos
Total	43.8	94.4	69.9	51.8	50.1	40.0	22.3	18.0
Area of Residence								
Urban	32.1	91.4	65.1	39.6	34.8	26.5	14.9	7.1
Rural	46.6	95.0	70.9	54.5	53.7	43.6	24.0	21.0
Age								
15-24 years	53.7	93.6	85.1	61.9	58.7	48.9	24.0	23.0
25-34 years	39.2	98.3	60.2	50.5	43.3	35.4	21.9	12.7
35-49 years	36.2	89.5	56.3	36.1	44.9	34.0	20.5	19.5
Educational Status (Respondent)								
No education	40.6	94.8	60.9	47.8	47.8	38.1	17.0	18.2
Less than primary completed	43.8	98.9	67.1	47.9	53.1	42.3	23.6	21.0
Primary completed	45.8	91.1	80.8	57.3	54.5	29.7	31.0	20.9
Some secondary and above	48.6	91.5	86.1*	59.5*	43.0*	54.5	14.5*	1.3

* Fewer than 25 women.

than in urban areas; 47 percent of rural mothers with a recent birth had not yet resumed sexual relations with their partners compared to 32 percent of urban mothers. Taking into account the length of the postpartum period, the results suggest that the practice is nearly universal among urban and rural mothers during the period immediately after birth; 90 percent or more of all mothers whose last child is less than three months report that they have not yet resumed sexual relations (Figure 5.6). However, the duration of the period of postpartum abstinence seems to be much longer for rural than urban mothers, with the average urban mother resuming sexual relations after the child is six months old while the average rural mother waits at least 12 months before resuming sexual relations with her partner.

Table 5.7 also shows that the prevalence of postpartum abstinence tends to be greater among women age 15-24 than among older women. Since younger couples presumably might be less likely to observe this customary practice than older couples, this pattern is somewhat unexpected. It probably reflects the fact that younger women are more frequently involved in consensual unions than older women and, consequently, as discussed in Chapter 4, are more likely to report that their partners are not living at home. A similar explanation can be offered for the observed variation in the prevalence of postpartum abstinence with a woman's educational status in which more highly educated (and younger) women are somewhat more likely than less educated (and older) women not to have resumed sexual relations with their partners (Figure 5.6).

5.2.2 Attitudes Toward Postpartum Abstinence

The practice of abstinence is clearly widespread in Botswana, and it has important implications with regard to child spacing and fertility. BFHS respondents were asked several additional questions with regard to their attitudes about postpartum abstinence in order to obtain a better understanding of the reasons for this custom and about the length of time

Figure 5.6

PERCENT NOT YET RESUMED SEXUAL RELATIONS AMONG WOMEN WHOSE LAST BIRTH OCCURRED WITHIN 36 MONTHS OF THE BFHS BY THE NUMBER OF MONTHS SINCE THE BIRTH AND AREA OF RESIDENCE, AGE AND EDUCATIONAL LEVEL, BOTSWANA, 1984

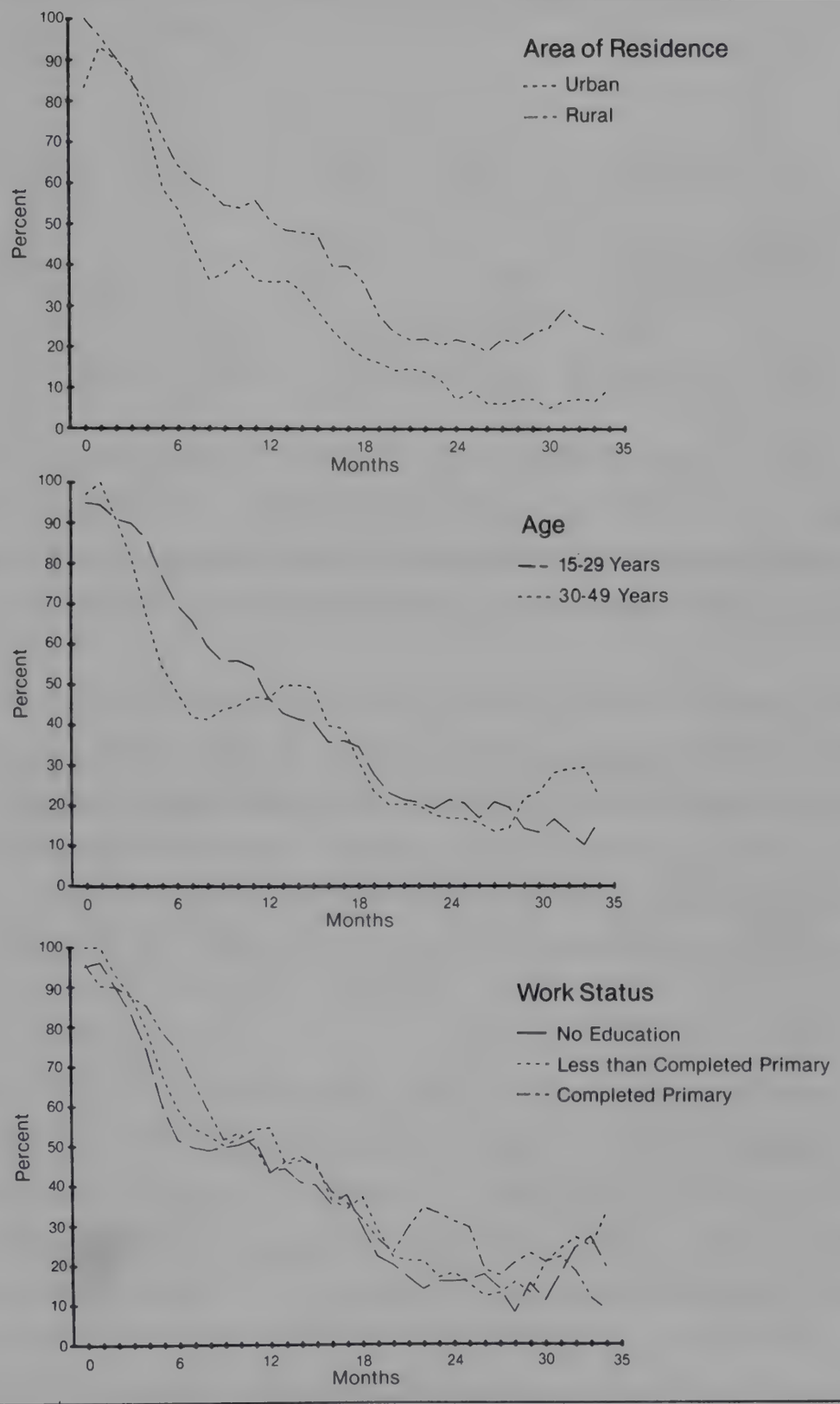


TABLE 5.8

PERCENT DISTRIBUTION OF WOMEN* BY WHETHER THEY CONSIDER IT CUSTOMARY TO ABSTAIN AFTER BIRTH AND AREA OF RESIDENCE, BOTSWANA, 1984

Abstinence	Total	Urban	Rural
Total Number	2,309	96	1,713
Total Percent	100.0	100.0	100.0
Customary after birth	79.5	80.1	79.3
Not customary after birth	20.5	19.9	20.7

* Excludes women not knowing at least one family planning method.

that a couple would usually abstain from sexual relations. Table 5.8 shows that eighty percent of women asked about the practice consider it customary to use abstinence following the birth of a child.

There is some difference of opinion concerning the customary duration of the period of abstinence. Table 5.9 shows that 48 percent of the women who were asked this question believe that a couple should abstain from sexual relations for up to six months following the birth of a child, 34 percent say that the period of abstinence is customarily between 7 and 12 months and 12 percent report that it is more than 12 months.

The primary purpose of abstaining from sexual relations appears to be to protect the health of the baby. Table 5.10 shows that 74 percent of women who believe it is customary to abstain after childbirth say that the principal reason couples practice abstinence is to protect the health of the child. Around 15 percent indicated that abstinence is practiced to protect the health of the mother, and 10 percent cite protection of the health of both the mother and child as the primary purpose of the custom.

TABLE 5.9

PERCENT DISTRIBUTION OF WOMEN* REGARDING ABSTINENCE AS CUSTOMARY BY CUSTOMARY DURATION OF ABSTINENCE AND AREA OF RESIDENCE, BOTSWANA, 1984

Customary Duration of Abstinence	Total	Urban	Rural
Total Number	1,835	477	1,358
Total Percent	100.0	100.0	100.0
0-6 months	48.4	53.3	46.7
7-12 months	33.7	32.8	34.1
More than 12 months	12.5	8.5	15.2
Not sure/Not stated	4.4	5.4	4.0

* Excludes women not knowing at least one family planning method.

Breastfeeding and postpartum abstinence are customary measures whose primary purpose is seen as the protection of the health of the mother and

TABLE 5.10

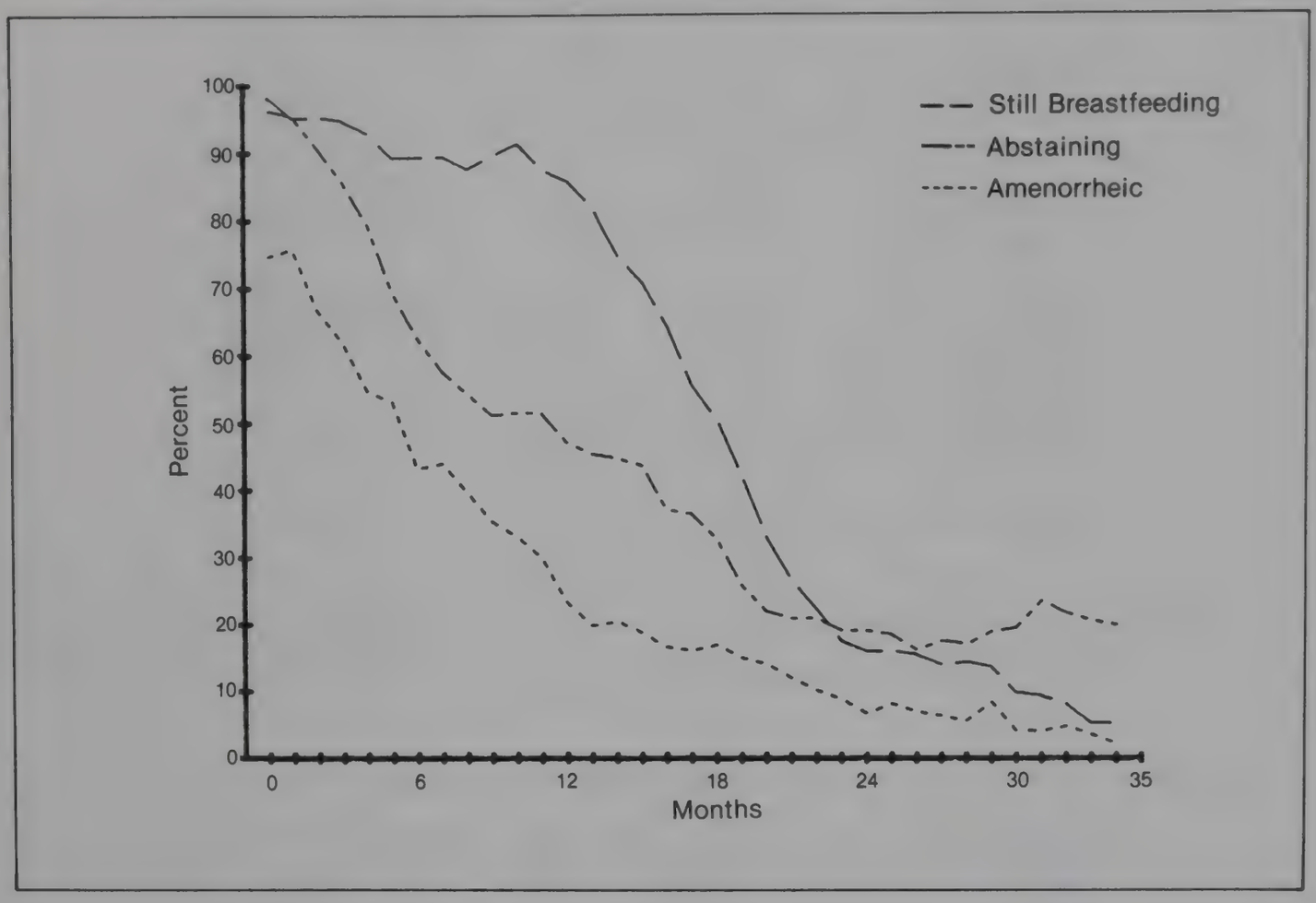
PERCENT DISTRIBUTION OF WOMEN* REGARDING ABSTINENCE AS CUSTOMARY BY REASON FOR CUSTOM AND AREA OF RESIDENCE, BOTSWANA, 1984

Reason For Abstinence	Total	Urban	Rural
Total Number	1,835	477	1,358
Total Percent	100.0	100.0	100.0
Protects health of baby	75.1	70.7	76.6
Protects health of mother	13.4	14.7	12.9
Protects health of Mother and child	9.4	12.7	8.3
Protects health of father	0.5	0.4	0.6
Other/not sure	1.6	1.5	1.6

* Excludes women not knowing at least one family planning method.

Figure 5.7

COMPARISON OF THE PERCENT STILL BREASTFEEDING, THE PERCENT NOT YET RESUMED SEXUAL RELATIONS AND THE PERCENT AMMENORRHEIC AMONG WOMEN WHOSE LAST BIRTH OCCURRED WITHIN 36 MONTHS OF THE BFHS BY THE NUMBER OF MONTHS SINCE THE BIRTH, BOTSWANA, 1984



child. In addition, these traditional practices have clear implications for reducing fertility levels in Botswana since they serve to increase the average interval between births. The relative importance of the practice of postpartum abstinence in this regard is evident in Figure 5.7 which shows that, for the average mother, the period of time in which postpartum abstinence is observed considerably exceeds the period of postpartum amenorrhea. As Botswana continues to develop, women may abandon or significantly reduce the length of time in which they practice breastfeeding or abstinence. Such changes which would increase the

risk of pregnancy for mothers in the postpartum period, might not only result in a greater probability of adverse effects on the health of the mother and child but would also tend to increase fertility levels. There is obviously a need to educate women about the importance of adopting family planning methods if they decide not to abstain from sexual relations and/or breastfeed for long durations during the postpartum period as is currently customary.

Chapter 6
MATERNAL AND CHILD HEALTH LEVELS

SUMMARY: Compared to other subSaharan African countries, the level of infant mortality in Botswana -estimated to be 70 per 1,000 births---is low. Nevertheless, the BFHS results show that one out of ten children ever born to women age 15-49 in Botswana had died by the time of the survey, and one out of every five of these women had experienced the death of at least one of her children.

Health services for women are well utilized with almost all pregnant women receiving prenatal care and two out of every three mothers reporting that they had delivered their last child at a health facility. Access to medical assistance at delivery is more limited among rural than urban mothers, and both urban and rural mothers are less likely to receive postnatal than prenatal care or medical assistance at the time of delivery.

Research has shown that the risk of morbidity and mortality associated with pregnancy is greater among teenagers, among mothers over age 35, women with four or more children and among women who had a birth less than two years ago. Seven out of every ten mothers in Botswana fall into one or more of these risk categories.

Most women recognize the potential health problems associated with teenage pregnancy, short birth intervals and high parity. However, despite their awareness, many women are exposed to these risks. For example, one out of every four ever pregnant women was less than 18 years old at the time of her first pregnancy. One out of every two women with more than two births also reported that the interval between her last two births was shorter than the ideal --which averages around 40 months.

In the previous chapter, BFHS data relating to breastfeeding and postpartum abstinence---two traditional practices with important implications for the health of a mother and her child---were examined. This chapter looks at other information relating to the health status of women and their children collected in the BFHS. Data on child survivorship are reviewed and estimates of infant mortality are presented. Indicators relating to the utilization of MCH services including the prevalence of prenatal and postpartum care and of medical assistance at delivery are reviewed. Factors contributing to high reproductive health

risk are identified, and attitudes toward a number of these variables including the age at first pregnancy and the interval between births are explored.

6.1 INFANT AND CHILD MORTALITY LEVELS

Data were collected in the BFHS with regard to the number of children born alive who later died. Questions used to obtain this information were designed to minimize the errors in the reporting of child deaths. However, it is possible that there was some underreporting of child deaths, particularly among rural women and women in the older age categories. Consequently, the results described below may underestimate somewhat the impact of child mortality in Botswana, especially in rural areas.

6.1.1 Prevalence of Child Loss

Table 6.1 shows the mean number of children ever born and the mean number of surviving children among all women age 15-49 by age and area of residence. Overall, women report an average of 3.1 births and 2.8 surviving children. The differences between the mean numbers of children ever born and surviving children are minor for the age groups 15-29 years. Thereafter, the difference between the means increases noticeably with age, with women aged 45-49 years reporting that, on average, slightly more than one of the seven children to whom they had given birth has died (Figure 6.1).

With regard to urban-rural differentials in child survivorship, the results suggest that levels of child mortality do not vary greatly by area of residence. Table 6.1 shows that, overall, the mean number of children ever born who later died is somewhat higher for rural women (0.39) than for urban women (0.24). By age, the mean number of children ever born who have died varies, in urban areas, from 0.01 children for

TABLE 6.1

MEAN NUMBER OF CHILDREN EVER BORN AND MEAN NUMBER OF SURVIVING CHILDREN AMONG ALL WOMEN BY AGE AND AREA OF RESIDENCE, BOTSWANA, 1984

Age	Total		Urban		Rural	
	Children Ever Born	Surviving Children	Children Ever Born	Surviving Children	Children Ever Born	Surviving Children
Total	3.05	2.70	2.31	2.07	3.28	2.89
15-19 years	0.25	0.25	0.20	0.19	0.28	0.27
20-24 years	1.44	1.32	1.23	1.13	1.52	1.39
25-29 years	2.87	2.62	2.48	2.28	3.01	2.74
30-34 years	4.16	3.75	3.80	3.38	4.29	3.88
35-39 years	5.36	4.62	4.44	4.03	5.54	4.74
40-44 years	6.27	5.42	5.78	5.00	6.37	5.50
45-49 years	6.84	5.77	6.04	5.10	6.95	5.86

women aged 15-19 years to 0.94 children among women in the oldest cohort while, in rural areas, it ranges from 0.01 children among women aged 15-19 years to 1.09 children among women in the 45-49 age group (Figure 6.1).

The absence of a substantial urban-rural differential in the mean number of children ever born reported as later dying is somewhat surprising as differentials favoring urban areas are usually observed for developing countries. The results simply may be a result of greater underreporting of child deaths among rural than urban women. However, they may also reflect the impact of rapid rural-to-urban migration, which would reduce the urban-rural differential, as well as improvements in access to health care for the rural population.

Table 6.1 considered the issue of child mortality from the point of view of its effect on average family size. Table 6.2 looks at child survivorship from the perspective of the proportion of all children ever born who die. The

Figure 6.1
MEAN NUMBER OF CHILDREN EVER BORN AND SURVIVING CHILDREN BY AGE AND AREA OF RESIDENCE, BOTSWANA, 1984

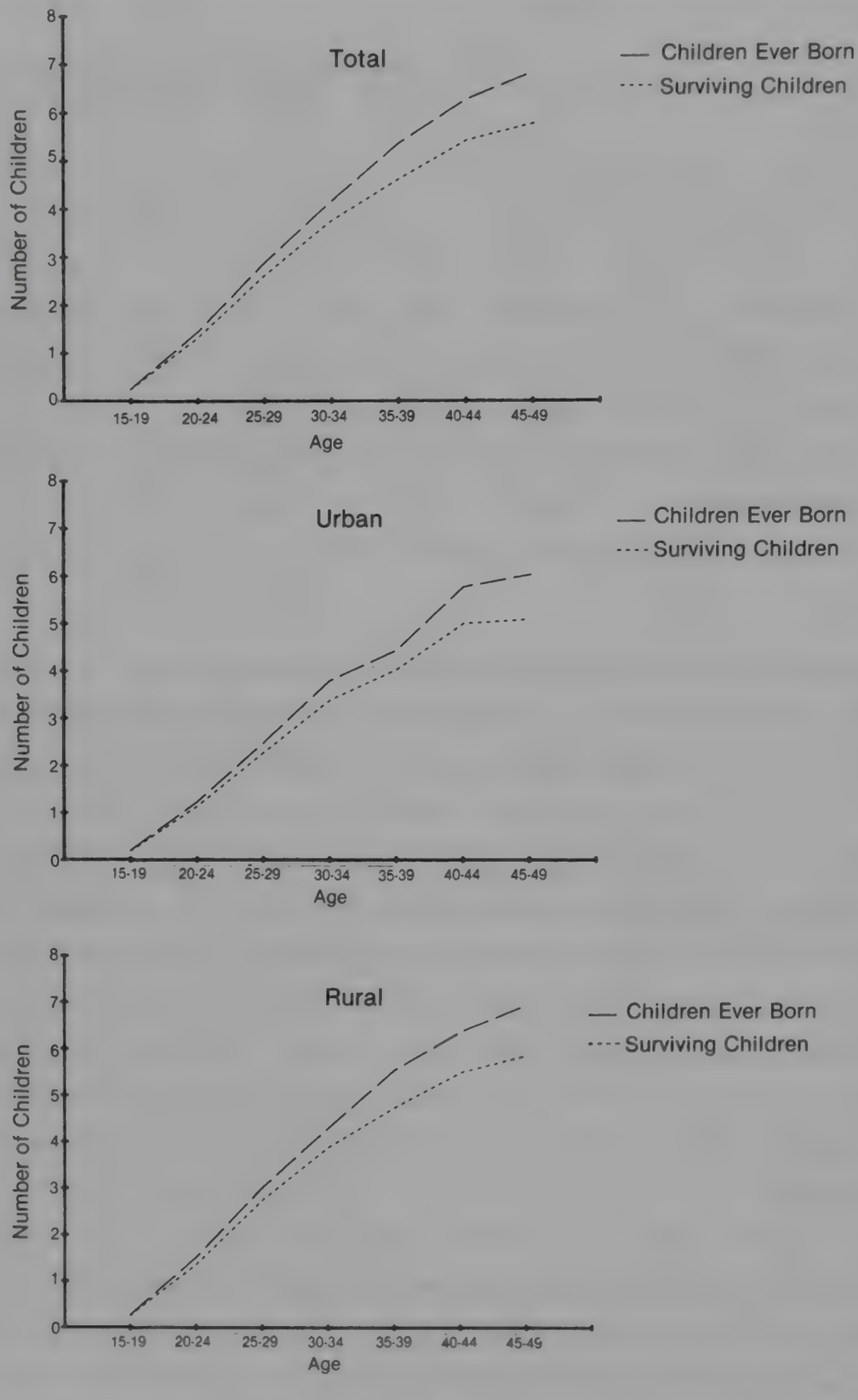


TABLE 6.2

PERCENT OF ALL CHILDREN BORN ALIVE WHO HAVE DIED BY AGE OF MOTHER AND AREA OF RESIDENCE, BOTSWANA, 1984

Age	Total	Urban	Rural
Total	11.5	10.4	11.8
15-19 years	0.4	0.5	0.4
20-24 years	8.3	8.0	8.6
25-29 years	8.7	8.1	9.0
30-34 years	10.0	11.2	9.6
35-39 years	13.8	9.2	14.4
40-44 years	13.6	13.5	13.7
45-49 years	15.6	15.6	15.7

table indicates that, on average, about one out of every ten children born to women in the sample had died by the time of the survey. As expected, the proportion of births reported as later dying increases with age, ranging from less than one percent of all births to women 15-19 years old to 16 percent among births to women in the 45-49 age group. These age differentials reflect the shorter average length of exposure to the probability of dying among children born to younger women as well as recent improvements in the health status of children in Botswana.

Child mortality is often assumed to have a direct impact on fertility as a woman whose child has died seeks a replacement birth. Table 6.3 looks at the proportion of women in Botswana who have experienced at least one child death. The table shows that slightly more than one out of every five women in Botswana has given birth to a child who later died. Women in urban areas are somewhat less likely than those in rural areas to have experienced the death of one of their children; 17 percent of urban women have had at least one of their children die compared to 25 percent of rural women. The proportion of women experiencing a child

TABLE 6.3

THE PERCENTAGE OF ALL WOMEN EVER EXPERIENCING THE DEATH OF A CHILD BY AGE AND AREA OF RESIDENCE, BOTSWANA, 1984

Age	Total	Urban	Rural
Total	23.1	17.3	24.9
15-19 years	0.8	0.8	0.7
20-24 years	10.3	8.7	10.8
25-29 years	20.8	16.5	22.3
30-34 years	30.5	32.2	29.9
35-39 years	42.9	29.1	45.6
40-44 years	49.9	45.9	50.7
45-49 years	54.3	54.2	54.4

death increases with age from less than one percent among women aged 15-19 years to more than 50 percent among women 45-49 years old.

6.1.2 Estimated Infant Mortality Rate

The child survivorship data presented in Table 6.1 can be used to estimate the level of infant mortality in Botswana. The infant mortality rates presented in Table 6.4 are an average of the estimates for the period 1979-1981[1]. They show that, in Botswana during that period, about 70 out of every 1,000 babies---about one out of every 14 babies---died before

[1] Care must be used in interpreting these estimates since they are influenced by the quality of the data as well as by assumptions underlying the indirect estimation techniques. These techniques are all based on an assumption that the proportion dead among children ever born can be considered to approximate the probability of dying between birth and various ages of childhood. For example, the proportion dead among children ever born to women aged 20-24 years is assumed to be equivalent to the probability of dying between birth and age 2 since births reported among women in this cohort will have occurred, on average, two years earlier. The procedure used in deriving the infant mortality estimates shown in Table 6.4 was developed by Trussell (1975, pp. 97-107). The rates shown represent an average of the rates for women aged 20-24 and 25-29 years (i.e., for the period 1979-1981).

TABLE 6.4

INDIRECT ESTIMATES OF THE INFANT MORTALITY RATE BY AREA OF RESIDENCE, BOTSWANA, 1977-1981

Area of Residence	Estimated Infant Mortality Rate
Total	70
Urban	67
Rural	72

their first birthday. The estimated infant mortality rates for urban and rural areas are quite close. The similarity in rates again probably reflects greater underreporting of child deaths among rural women as well as the influence of migration of rural women into urban areas on the urban rates and of improvements in rural health care service delivery.

6.2 MATERNAL HEALTH CARE

Another of the objectives of the BFHS was to determine patterns of use of health services for women. The vast majority of these services are provided by the Government of Botswana through the MCH/FP programme described in Section 1.3. The following findings indicate that these services are widely used with minimal urban-rural differences. In order to enhance reliability of the responses, data for the following tables and figures was collected only from women who had given birth within 36 months of the survey.

6.2.1 Prenatal Care

Prenatal care is provided by registered nurse-midwives of which there is at least one at the clinic level and above. In health posts and

TABLE 6.5

PERCENT OF WOMEN WHOSE LAST BIRTH OCCURRED WITHIN 36 MONTHS OF BFHS WHO EVER RECEIVED PRENATAL CARE OR WHO WERE VISITED AT HOME BY A HEALTH WORKER BY AREA OF RESIDENCE, BOTSWANA, 1984

Prenatal Care Indicator	Total	Urban	Rural
Total number	1,523	289	1,234
Percent receiving prenatal care at health facility	90.3	95.6	89.0
Percent visited at home by health worker before birth	11.3	14.0	10.7

clinics, the objective is identification of a mother "at risk" so that necessary action is taken.

Table 6.5 demonstrates that 90 percent of the women who had given birth within the previous 36 months had visited a hospital, clinic or doctor for a prenatal check-up. Prenatal services are widely used in both urban (96 percent) and rural (89 percent) settings. During their pregnancy, 11 percent also had been visited in their homes by a health worker.

6.2.2 Care at Delivery

All mothers in Botswana are encouraged to deliver under the supervision of trained health personnel (doctor or nurse/midwife) at a local clinic with a maternity ward, a health center or a district hospital. Data collected from the BFHS indicates that 66 percent of women who had given birth within 36 months of the survey had delivered at a health facility (Table 6.6). Urban women were more likely than rural women to have given birth in a health

TABLE 6.6

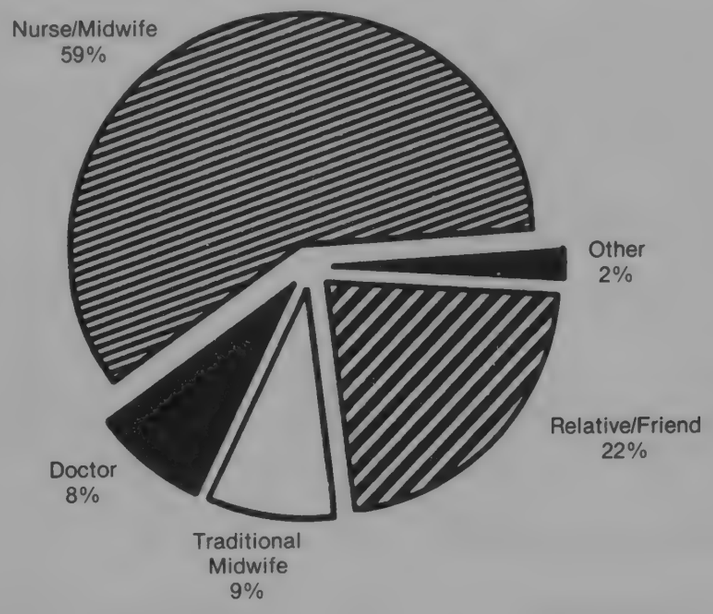
PERCENT DISTRIBUTION OF WOMEN WHOSE LAST BIRTH OCCURRED WITHIN 36 MONTHS OF THE BFHS BY PLACE OF DELIVERY, ATTENDANT AT DELIVERY AND AREA OF RESIDENCE, BOTSWANA, 1984

	Total	Urban	Rural
Total number	1,523	289	1,234
Place of delivery			
Total percent	100.0	100.0	100.0
Home	34.3	12.4	39.4
Hospital/health center/clinic	65.7	87.4	60.6
Not stated	0.0	0.0	0.0
Attendant at delivery			
Total percent	100.0	100.0	100.0
Doctor	7.6	9.2	7.2
Nurse/Midwife	59.0	79.3	54.2
Traditional midwife	9.1	4.4	10.2
Relative/Friend	22.4	6.8	26.2
Other	1.7	0.0	2.1
Not stated	0.2	0.3	0.1

facility; 87 percent of urban mothers reported that the delivery of their last child took place in a health facility compared to only 61 percent of rural women.

Figure 6.2 shows that the majority (59 percent) of the 1,523 deliveries reported in the BFHS were attended by a nurse/midwife. Doctors attended 8 percent of the reported deliveries, presumably those of some private patients and non-routine births. Almost all deliveries attended by a nurse/midwife or doctor occurred at a health facility. Routine domiciliary deliveries by health personnel are not encouraged because

Figure 6.2
PERCENT DISTRIBUTION OF WOMEN WHOSE LAST BIRTH OCCURRED WITHIN 36 MONTHS OF THE BFHS BY THE TYPE OF PERSON ASSISTING WITH THE DELIVERY, BOTSWANA, 1984



of cost in staff time. However, emergency home deliveries are done. The BFHS indicates that this is not a significant number.

Traditionally in Botswana, an older relative such as a grandmother or aunt assists in home deliveries. These women do not generally identify themselves as traditional midwives, and they usually assist only other family members because of fear of accusations of bewitchment or malpractice if they went outside family circles. As a consequence, during the BFHS, it was sometimes difficult to distinguish between a respondent's friend or relative and a traditional midwife. However, when the respondent mentioned that she was assisted at delivery by a friend or relative, an effort was made to determine whether that person usually assisted with deliveries in the community. For purposes of the survey, a woman who assisted with five or more deliveries in a year was considered to be a traditional midwife.

According to this definition, 22 percent of the total deliveries reported in BFHS were attended by a relative or friend and 9 percent by a traditional midwife. In urban areas, only 7 percent of the births were attended by a relative or friend and 4 percent by traditional midwifes (Table 6.6). The comparable figures in rural areas were much higher with 26 percent of births attended by a relative or friend and 10 percent by a traditional midwife.

The number of women delivering in health facilities or attended by trained health personnel is considerably lower than those who seek prenatal care at a health facility. Investigations as to why this might occur indicate a number of factors including problems of transport at short notice, isolation from family members while in a health facility and inability to carry out traditional practices related to delivery if away from home.

6.2.3 Postnatal Care

Postnatal care in Botswana falls into two categories: (1) immediate postpartum care at home within the first week after delivery and (2) examination in the health facility at the end of the puerperium at about six to eight weeks after the birth. The home visits for immediate postpartum care follow up the mother and infant for the critical first week after delivery. In villages, these visits are made by family welfare educators and clinic nurses. If complications develop, a midwife is notified. In some urban areas such as Gaborone, a special team headed by a public health nurse visits mothers in their homes.

As mentioned in Chapter 5, mothers in Botswana traditionally observe a period of confinement following birth called "botsetsi". The duration of "botsetsi" varies from one to six months. An elderly woman will cook, bathe, massage and generally care for the newly delivered mother. The new mother usually has her own feeding utensils and lives in a hut apart from the rest of the family. She is given a special diet of extra vegetables

TABLE 6.7

PERCENT OF WOMEN WHOSE LAST BIRTH OCCURRED WITHIN 36 MONTHS OF THE BFHS WHO EVER RECEIVED POSTNATAL CARE OR WHO WERE VISITED AT HOME BY A HEALTH WORKER FOLLOWING BIRTH BY AREA OF RESIDENCE, BOTSWANA, 1984

Postnatal Care Indicator	Total	Urban	Rural
Total number	1,523	289	1,234
Percent receiving postpartum care at health facility	54.3	62.8	52.3
Percent visited by health worker at home following birth	26.1	35.3	24.0

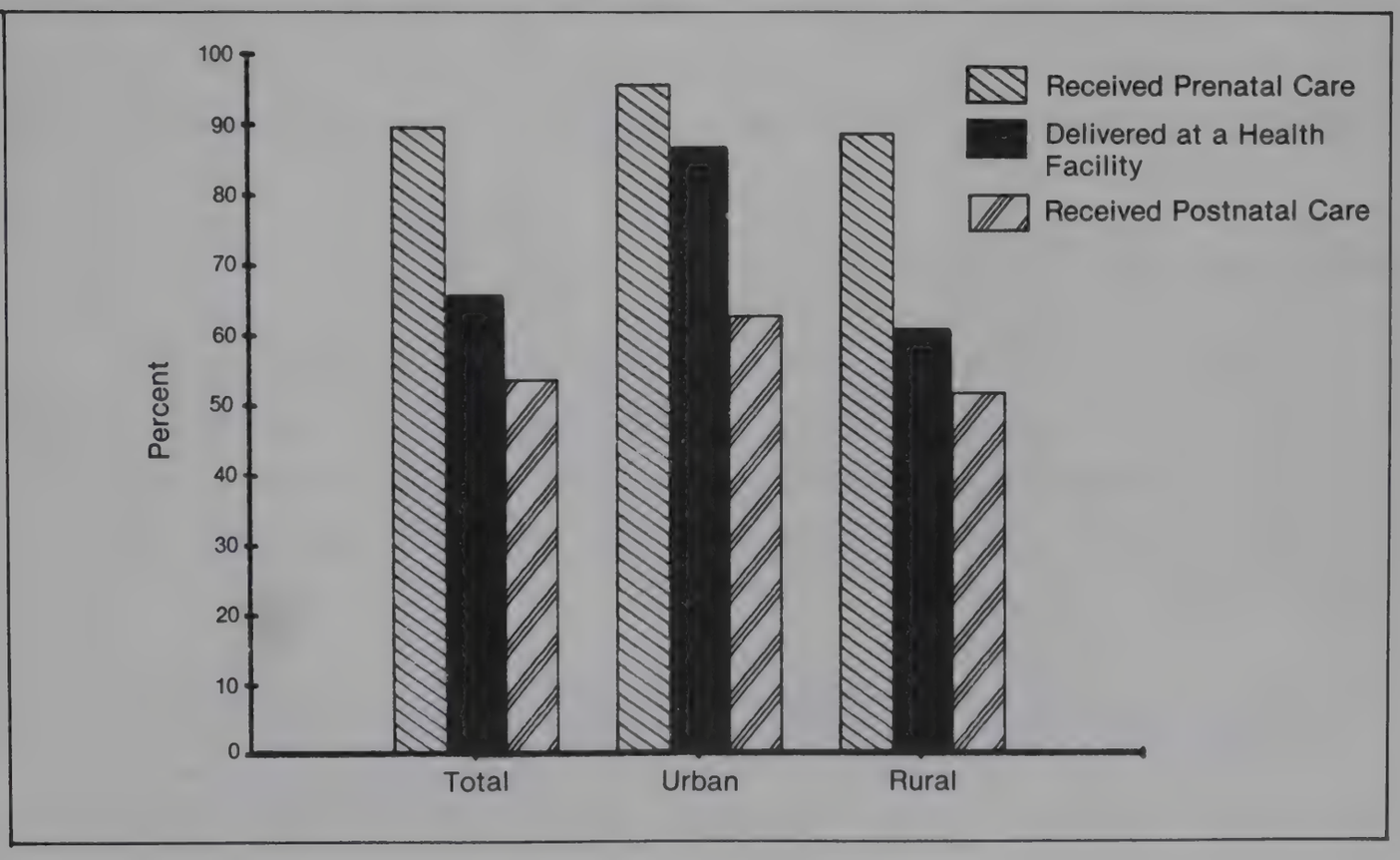
and meat. A large stick is placed in front her hut to indicate to all that a mother is in confinement. A woman in "botsetsi" usually can be visited by a health worker at home, and she also visits the postnatal clinic. A study of attitudes toward postnatal care in one rural village indicated that, although factors such as nurses' attitudes, distance from the clinic and lack of awareness negatively affect attendance at postnatal clinics by new mothers, the custom of "botetsi" does not contribute to poor attendance at the clinics (Molefe and Kereng, 1984).

Table 6.7 indicates that 54 percent of women who delivered their last child within 36 months of the survey received postnatal care at a health facility, and 26 percent were visited in their homes within a week of their delivery. These findings should be interpreted with caution as, in answering the question, women may have had problems in distinguishing postnatal care from other health services provided after the delivery. For example, women may have confused receiving care for their infant at a child welfare clinic with postnatal care for themselves. Thus, the

results presented in Table 6.7 may overstate the extent to which women actually receive postnatal care.

The possibility that the proportion receiving postnatal care may be overestimated should be remembered in considering Figure 6.3 which summarizes information about the utilization of various MCH services among mothers who delivered their last birth within 36 months of the BFHS interview. The figure shows that women in Botswana are much less likely to receive postnatal care than to deliver their babies at a health facility or, especially, to have prenatal examinations. The figure also indicates that, as noted above, urban women are more likely than rural women to receive prenatal and postnatal care and to deliver their babies at health facility than rural women. The urban-rural differential is greater with respect to the delivery at a health facility than for the other indicators.

Figure 6.3
MATERNAL HEALTH CARE INDICATORS, BOTSWANA, 1984



6.3 REPRODUCTIVE HEALTH PRACTICES AND ATTITUDES

A number of research studies have shown that the risks of morbidity and mortality associated with pregnancy are greater for mothers and their children for women in the following categories:

- women less than 18 years old
- women 35 years and older
- women whose last birth occurred less than 24 months ago
- women with four or more births (Rinehart et al., 1984).

Table 6.8 shows the proportion of currently in union women falling into each of these reproductive health risk categories. Overall, about three out of every four women (73 percent) belong in one or more of the above groups; the percentage of urban women falling into one or more of these risk groups is 61 percent compared to 77 percent of rural women (Figure 6.4).

Data from the BFHS can be used to examine opinions and practice with respect to a number of these risk factors. Of key concern are the attitudes a behavior with regard to the spacing of births and the age at first pregnancy

6.3.1 Interval Between Births

Botswana has a strong tradition of at least a 2-3 year interval between births. Custom holds that a wife should bear her husband as many children as she can, provided that she does not become pregnant until she has weaned the child already at her breast. Schapera observes, for example, that

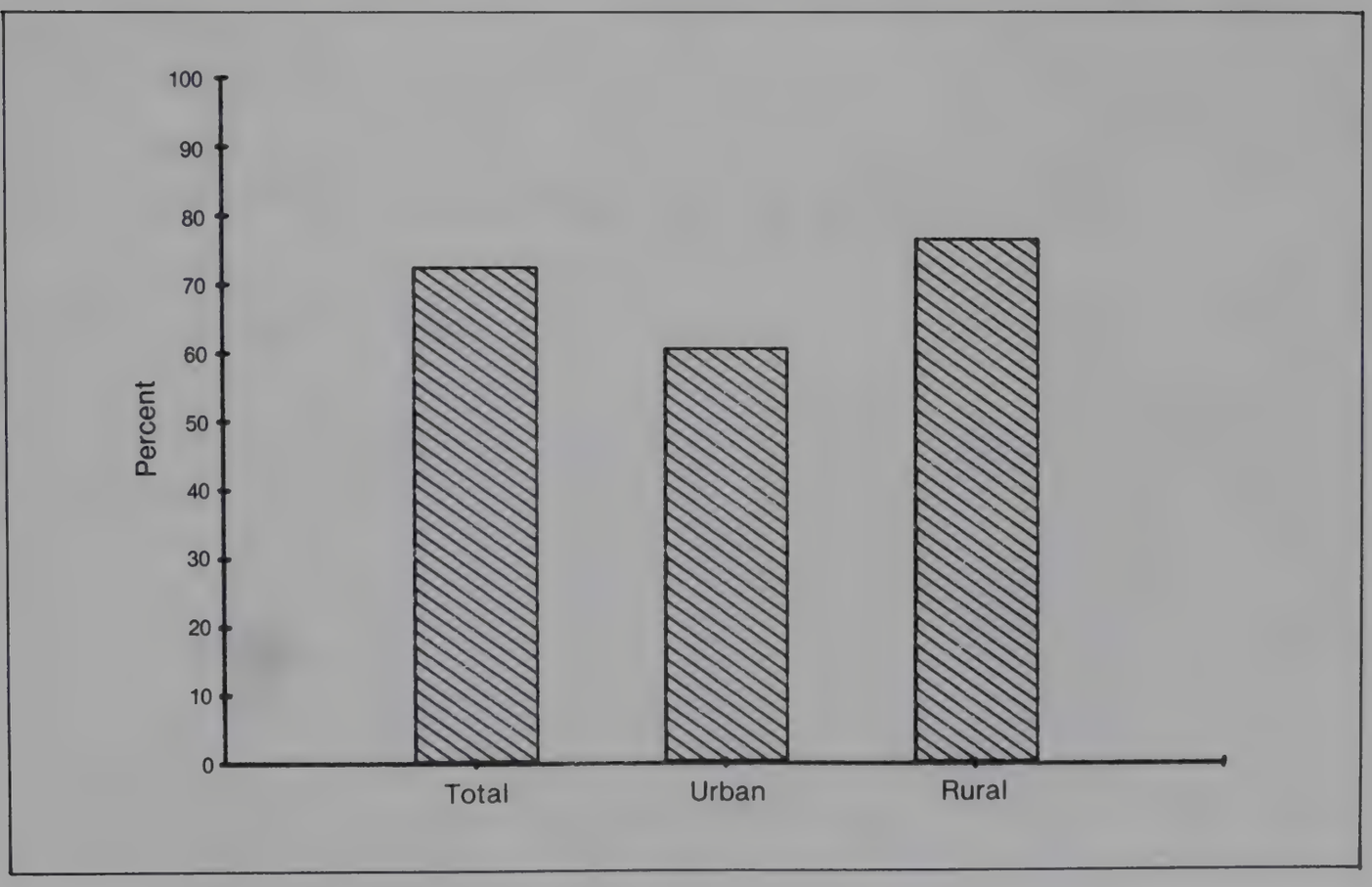
> Sexual relations between husband and wife are not forbidden while she is suckling a child, as is the case with some other Bantu peoples; but the husband is expected to practice <u>coitus interruptus</u> until the child is weaned. It is said that if a woman becomes pregnant again

TABLE 6.8

PERCENT OF CURRENTLY IN UNION WOMEN IN HIGH REPRODUCTIVE HEALTH RISK CATEGORIES BY AREA OF RESIDENCE, BOTSWANA, 1984

Health Risk Category	Total	Urban	Rural
Women 17 years and younger	4.1	5.9	3.6
Women 35 years and older	29.4	19.1	32.5
Women whose last live birth occurred less than 24 months ago	43.6	34.4	46.5
Women with four or more births	41.8	29.6	45.5

Figure 6.4
PERCENT OF CURRENTLY IN UNION WOMEN FALLING INTO HIGH REPRODUCTIVE HEALTH RISK CATEGORIES, BOTSWANA, 1984



while still weaning a child (which may take two or three years) the child at her breast will become foolish or sickly or suffer in some other way. A child thus afflicted is known as serathane (1970, pp. 154-155).

Besides coitus interruptus, breastfeeding and periodic abstinence are traditional methods used to extend the interval between birth and the next pregnancy. As discussed in the previous chapter, the latter practices are widespread among mothers in Botswana.

The BFHS results indicate that the tradition of an interval of two or more years between births is still strong, both as an ideal and in actual practice. Table 6.9 shows over 70 percent of all women believe that the interval between births should be at least 24 months, 40 percent say that it should be at least 36 months and 17 percent would prefer to have an interval of at least 48 months between births. Attitudes in urban and rural areas are similar with the mean ideal interval between births varying by only about 3 months between urban women (41.9 months) and rural women (39.3 months).

TABLE 6.9

PERCENT DISTRIBUTION OF ALL WOMEN BY IDEAL INTERVAL BETWEEN BIRTHS (IN MONTHS) AND AREA OF RESIDENCE, BOTSWANA, 1984

Ideal Interval	Total	Urban	Rural
Total number	3,064	723	2,341
Total percent	100.0	100.0	100.0
12 months or less	5.4	3.1	6.1
13-24 months	24.5	19.1	26.3
25-36 months	30.3	32.5	29.5
37-48 months	22.4	24.7	21.7
49-60 months	11.8	14.0	11.1
61 months or more	5.1	6.2	4.8
Not sure/Not stated	0.5	0.4	0.5
Mean (in months)	39.9	41.9	39.3

Data collected in the BFHS with regard to length of time since the last live birth and the next to the last (penultimate) live birth allow an examination of the issue of whether the actual intervals between births approximate what women consider ideal. The results indicate that for one out of every two women with two or more births the interval between the last two live births was shorter than the woman considered ideal. The proportions reporting that the interval between births was shorter than what was ideal are identical among urban and rural mothers.

Table 6.10 shows that, overall, for women with two or more births, the mean interval between the last live birth and the penultimate live birth was slightly greater than the mean interval women consider ideal. These patterns are similar for urban and rural women. However, among women 15-24 years of age, there is a considerable gap between their ideal spacing and the spacing they actually achieved (Figure 6.5). Significant differences between the ideal and actual intervals between births are observed for both urban and rural mothers in these cohorts. In interpreting these results, it is important to remember that substantial proportions of women in these age groups have had only one birth. These women may be more successful at attaining their desired interval between births than women who have already had two births.

6.3.2 Age at First Pregnancy

Concern has been expressed in Botswana about the problem of teenage pregnancies. The BFHS respondents were asked about the age that they considered ideal for a woman to have her first child. Table 6.11 shows that more than 90 percent think that a woman should be at least 18 years old before she has her first child and 60 percent think that she should be at least 20 years old before having a baby. Urban-rural differences with regard to the age at first pregnancy are not large; however, the percentage of urban women who think that a woman should be at least 25

TABLE 6.10

MEAN ACTUAL INTERVAL BETWEEN BIRTHS AND MEAN IDEAL INTERVAL BETWEEN BIRTHS FOR ALL WOMEN WITH TWO OR MORE BIRTHS* BY AGE AND AREA OF RESIDENCE, BOTSWANA, 1984

Age	Total		Urban		Rural	
	Actual	Ideal	Actual	Ideal	Actual	Ideal
Total	43.4	40.4	45.0	42.3	42.9	39.9
15-19 years	25.4	41.0	35.9	46.3	22.4	39.4
20-24 years	34.9	43.3	31.4	43.7	35.9	43.2
25-29 years	39.1	39.9	43.7	44.7	37.6	38.3
30-34 years	43.2	40.3	47.7	42.9	41.6	39.3
35-39 years	48.4	41.8	50.1	40.1	48.1	42.2
40-44 years	49.4	38.7	49.5	37.9	49.4	38.9
45-49 years	51.5	37.4	56.9	37.1	50.8	37.5

* Excludes 116 women for whom the interval between births is not known.

Figure 6.5

COMPARISON OF THE MEAN INTERVAL BETWEEN THE LAST LIVE BIRTH AND THE SECOND TO THE LAST LIVE BIRTH AND THE MEAN IDEAL INTERVAL BETWEEN BIRTHS FOR WOMEN WITH TWO OR MORE BIRTHS, BOTSWANA, 1984

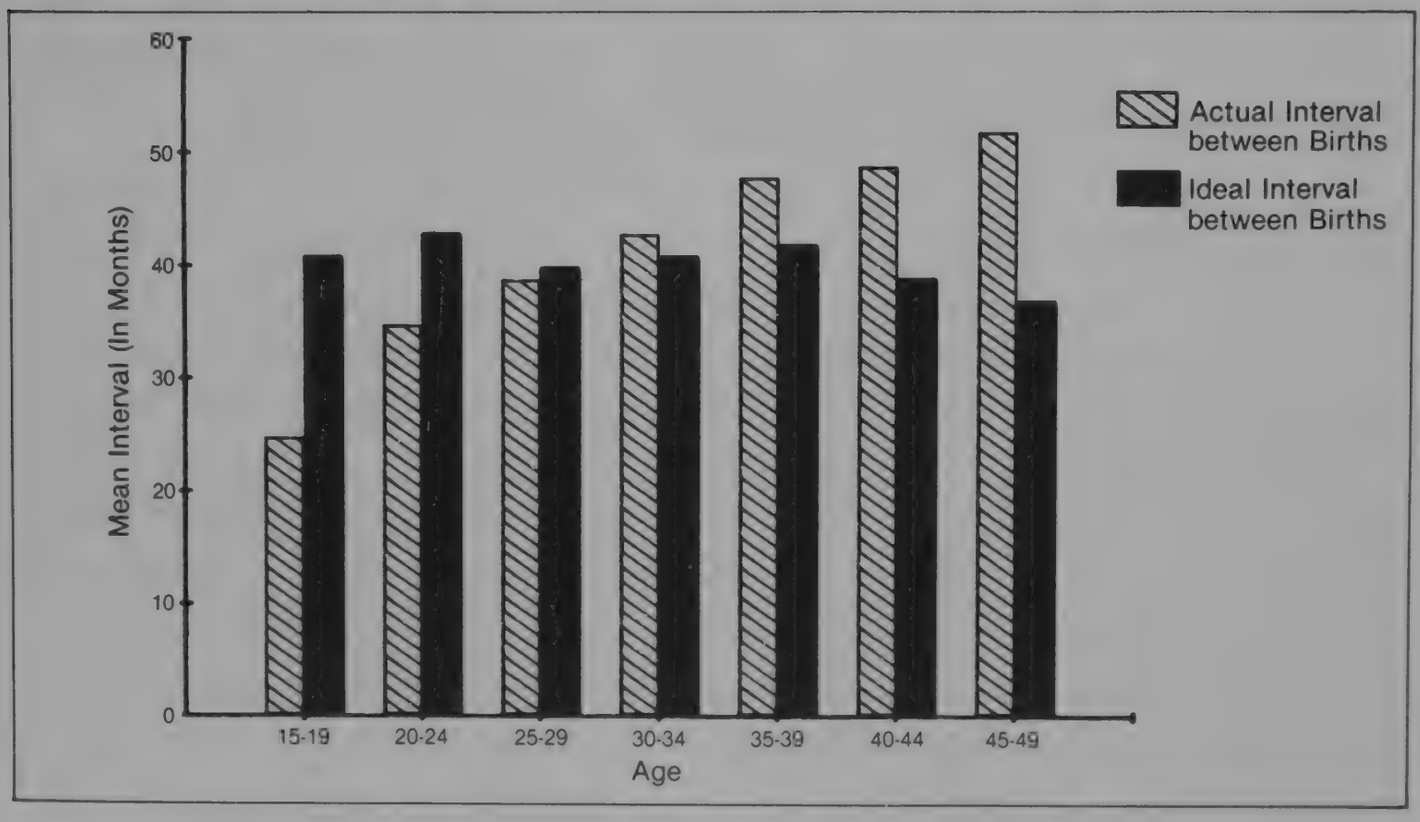


TABLE 6.11

PERCENT DISTRIBUTION OF ALL WOMEN BY THE IDEAL AGE AT FIRST PREGNANCY AND AREA OF RESIDENCE, BOTSWANA, 1984

Ideal Age at First Pregnancy	Total	Urban	Rural
Total number	3,064	723	2,341
Total percent	100.0	100.0	100.0
Less than 15 years	0.7	0.3	0.8
15-17 years	5.4	5.1	5.5
18-19 years	12.0	10.2	12.5
20-21 years	59.1	60.0	58.9
22-24 years	11.5	11.2	11.6
25 years or more	10.4	12.7	9.7
Not sure/Not stated	0.9	0.6	1.0
Mean	20.6	20.8	20.6

years old before she has her first child (13 percent) is somewhat higher than the comparable percentage of rural women (10 percent).

How do women's own experiences compare with their ideals? Table 6.12 indicates that, among ever pregnant women in Botswana, 28 percent had had the first pregnancy before they were 18 years old, 53 percent were between 18 and 21 years old when they became pregnant and 19 percent were at least 22 years old at the time of their first pregnancy. The table also shows that, among ever pregnant women in the 15-19 age group, 75 percent became pregnant before their eighteenth birthday. Because only about one-third of all women in the 15-19 age cohort have ever been pregnant, this percentage clearly overstates the proportion of teenagers who are subject to the health risks of early pregnancies. By looking at the experience of women age 20-24, 84 percent of whom report at least one pregnancy, it

TABLE 6.12

PERCENT DISTRIBUTION OF ALL EVER PREGNANT WOMEN BY AREA OF RESIDENCE, AGE AT FIRST PREGNANCY AND CURRENT AGE, BOTSWANA, 1984

Area of Residence and Age at First Pregnancy	Total	Current Age 15-19 years	20-24 years	25-34 years	35-49 years
Total					
Total number	2,496	175	565	958	798
Total percent	100.0	100.0	100.0	100.0	100.0
Less than 15 years	3.8	10.6	2.5	3.2	3.7
15-17 years	24.7	64.1	29.8	22.0	15.7
18-19 years	30.3	25.3	39.9	30.9	23.8
20-21 years	22.4	0.0	22.1	24.5	25.0
22-24 years	11.3	0.0	5.6	13.0	15.9
25 years or more	7.4	0.0	0.0	6.4	15.5
Not sure/Not stated	0.1	0.0	0.0	0.0	0.4
Urban					
Total number	538	40	129	247	122
Total percent	100.0	100.0	100.0	100.0	100.0
Less than 15 years	2.4	6.8	2.5	1.7	2.2
15-17 years	24.4	65.9	28.1	20.2	15.3
18-19 years	33.8	27.3	45.3	32.2	26.9
20-21 years	22.6	0.0	19.3	27.4	23.9
22-24 years	11.6	0.0	4.9	13.8	17.9
25 years or more	5.3	0.0	0.0	4.8	13.8
Not sure/Not stated	0.0	0.0	0.0	0.0	0.0
Rural					
Total number	1,958	135	436	711	676
Total percent	100.0	100.0	100.0	100.0	100.0
Less than 15 years	4.1	11.8	2.6	3.8	4.0
15-17 years	24.8	63.5	30.3	22.6	15.8
18-19 years	29.3	24.7	38.3	30.4	23.3
20-21 years	22.3	0.0	23.0	23.5	25.2
22-24 years	11.3	0.0	5.8	12.8	15.5
25 years or more	8.0	0.0	0.0	6.9	15.8
Not sure/Not stated	0.2	0.0	0.0	0.0	0.5

is possible to control for this censoring effect and obtain some indication of the proportion of women who will become pregnant before they are 18 years old. Table 6.12 shows that 32 percent of the women in the 20-24 cohort report that they became pregnant for the first time before their eighteenth birthday, confirming that a substantial proportion of teenagers in Botswana are subject to the health risks of early pregnancies.

An examination of the results presented in Table 6.12 also indicates that there are not great differences in the age at first pregnancy between urban and rural women. The data suggest that, in both urban and rural areas, about three out of every ten women become pregnant for the first time before their eighteenth birthday, around one out of every two women has her first pregnancy between her eighteenth and twenty-first birthdays and only around one out of every five women is 22 years and older before she first becomes pregnant.

Table 6.13 compares the mean age at first sexual union, the mean age at first pregnancy and the mean ideal age at first pregnancy among ever

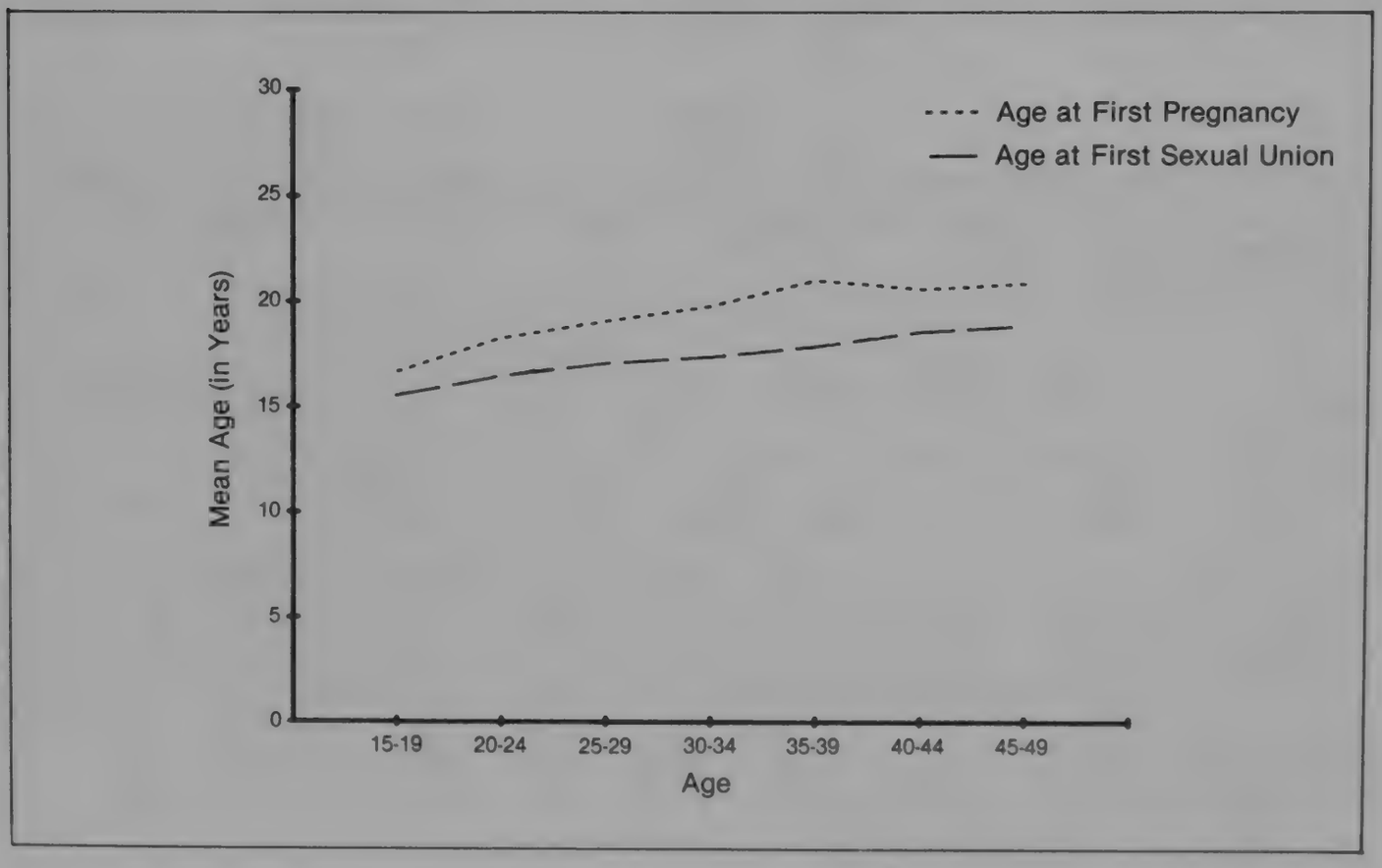
TABLE 6.13

MEAN AGE AT FIRST SEXUAL UNION (AFSU), MEAN ACTUAL AGE AT FIRST PREGNANCY (AAFP) AND MEAN IDEAL AGE AT FIRST PREGNANCY (IAFP) AMONG EVER PREGNANT WOMEN BY CURRENT AGE AND AREA OF RESIDENCE, BOTSWANA, 1984

Age	Total			Urban			Rural		
	AFSU	AAFP	IAFP	AFSU	AAFP	IAFP	AFSU	AAFP	IAFP
Total	17.3	19.4	21.3	17.1	19.2	21.2	17.3	19.5	21.4
15-19 years	15.6	16.7	19.8	15.4	16.6	20.3	15.6	16.7	19.7
20-24 years	16.5	18.3	20.5	16.4	18.3	21.2	16.5	18.3	20.2
25-29 years	17.1	19.1	22.1	17.0	19.2	21.3	17.1	19.1	22.4
30-34 years	17.4	19.8	21.5	17.3	19.9	21.3	17.4	19.7	21.6
35-39 years	17.9	21.0	21.8	17.7	20.2	20.8	18.0	21.2	22.0
40-44 years	18.6	20.6	21.7	18.7	20.9	21.9	18.6	20.6	21.7
45-49 years	18.9	20.9	21.3	19.3	20.7	20.1	18.8	21.0	21.5

pregnant women. The results suggest that, on average, a women in Botswana becomes pregnant within two years of the time that she first becomes sexually active. Patterns are similar among urban and rural women with the average woman in both groups reporting that she was 17 years old when she first became sexually active and 19 years old when she had her first pregnancy. The reported gap between the mean age at first sexual union and the mean age at first pregnancy tends to increase with age, ranging from only one year among women age 15-19 to three years among women in the 35-39 age group (Figure 6.6). Again it should be noted that the comparatively short interval between the first sexual union and the first pregnancy observed among ever pregnant teenagers does not reflect the experience of the entire cohort since many teenagers have either not yet had a pregnancy or not yet initiated sexual activity.

Figure 6.6
COMPARISON OF MEAN AGE AT FIRST SEXUAL UNION AND MEAN AGE AT FIRST PREGNANCY AMONG EVER PREGNANT WOMEN CONTROLLING FOR CURRENT AGE, BOTSWANA, 1984



Nevertheless, the proportions of teenagers who have ever been in union and who have had at least one pregnancy are quite high in Botswana (Table 6.14). Overall, one out of every two teenagers reports that she has ever been in union, and slightly more than one out of every four teenagers has had at least one pregnancy. Figure 6.7 shows the percentages of teenagers who have ever been in union and who have ever been pregnant by single years of age. The figure suggests that, among 15 year olds, one out of every six has ever been in union, and about one out of every fourteen has had a pregnancy. These proportions increase rapidly with age, with one out of every two 17 year olds indicating that she has ever been in union, and one out of every four girls in this age group having had a pregnancy. Among 18 year olds, the comparable figures are 65 percent and 43 percent, respectively, while, among 19 year olds, 81 percent have ever been in union and 50 percent have ever been pregnant.

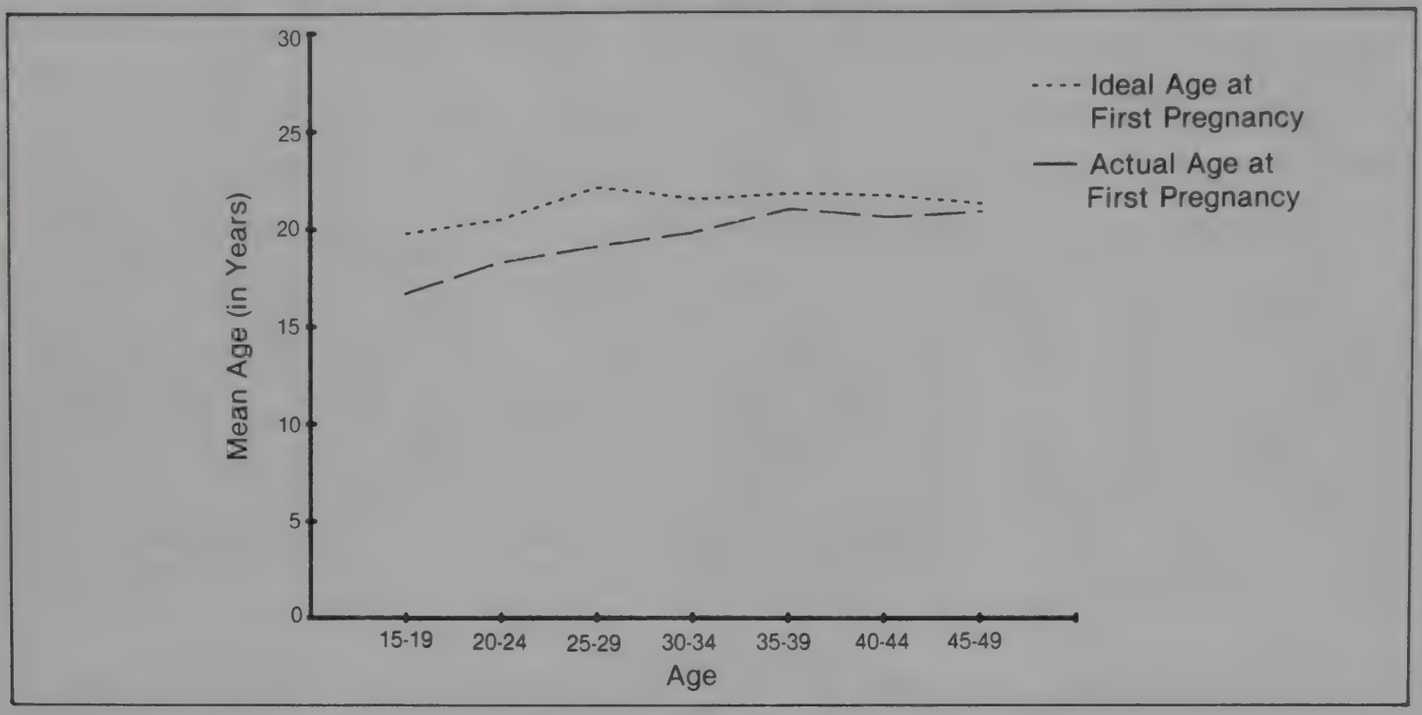
Urban and rural teenagers do not differ greatly with respect to the proportion who report that they have ever been in union; in urban areas, 53 percent have ever been in union while the comparable figure in rural

TABLE 6.14

PERCENT OF WOMEN AGE 15-19 YEARS WHO HAVE EVER BEEN IN UNION AND PERCENT OF WOMEN AGE 15-19 YEARS WHO HAVE EVER BEEN PREGNANT BY SINGLE YEARS OF AGE AND AREA OF RESIDENCE, BOTSWANA, 1984

Age	Total		Urban		Rural	
	Percent Ever in Union	Percent Ever Pregnant	Percent Ever in Union	Percent Ever Pregnant	Percent Ever in Union	Percent Ever Pregnant
Total	53.2	29.3	57.9	23.5	51.3	31.6
15 years	18.4	7.3	28.6	4.1	16.1	8.1
16 years	31.6	7.6	36.0	8.0	29.3	7.3
17 years	55.3	24.2	51.7	19.5	57.1	26.5
18 years	67.8	45.4	72.6	30.1	66.1	50.8
19 years	84.9	54.4	85.7	45.1	84.5	58.5

Figure 6.7
COMPARISON OF MEAN ACTUAL AGE AT FIRST PREGNANCY UNION AND MEAN IDEAL AGE AT FIRST PREGNANCY AMONG EVER PREGNANT WOMEN CONTROLLING FOR CURRENT AGE, BOTSWANA, 1984



areas is 51 percent. The proportion of teenagers who have ever been pregnant is higher is rural than in urban areas (32 percent vs. 24 percent).

As was indicated above, the majority of women in Botswana think that a woman should be at least 18 years old before she becomes pregnant. However, as the discussion of the prevalence of teenage pregnancy suggests, many of these women are much younger at the time they first become pregnant than they think is ideal. Summary comparisons of the ideal and actual ages at first pregnancy reported for ever pregnant women are presented in Table 6.15 and Figure 6.8. The table shows that three out of every five women were younger at the time they first became pregnant than what they consider to be the ideal age at first pregnancy. Urban women (62 percent) are slightly more likely than rural women (58 percent) to indicate that they became pregnant at a younger age than ideal. Figure 6.8 shows that the gap between the actual and ideal age at first pregnancy tends to be greater among ever pregnant women under age

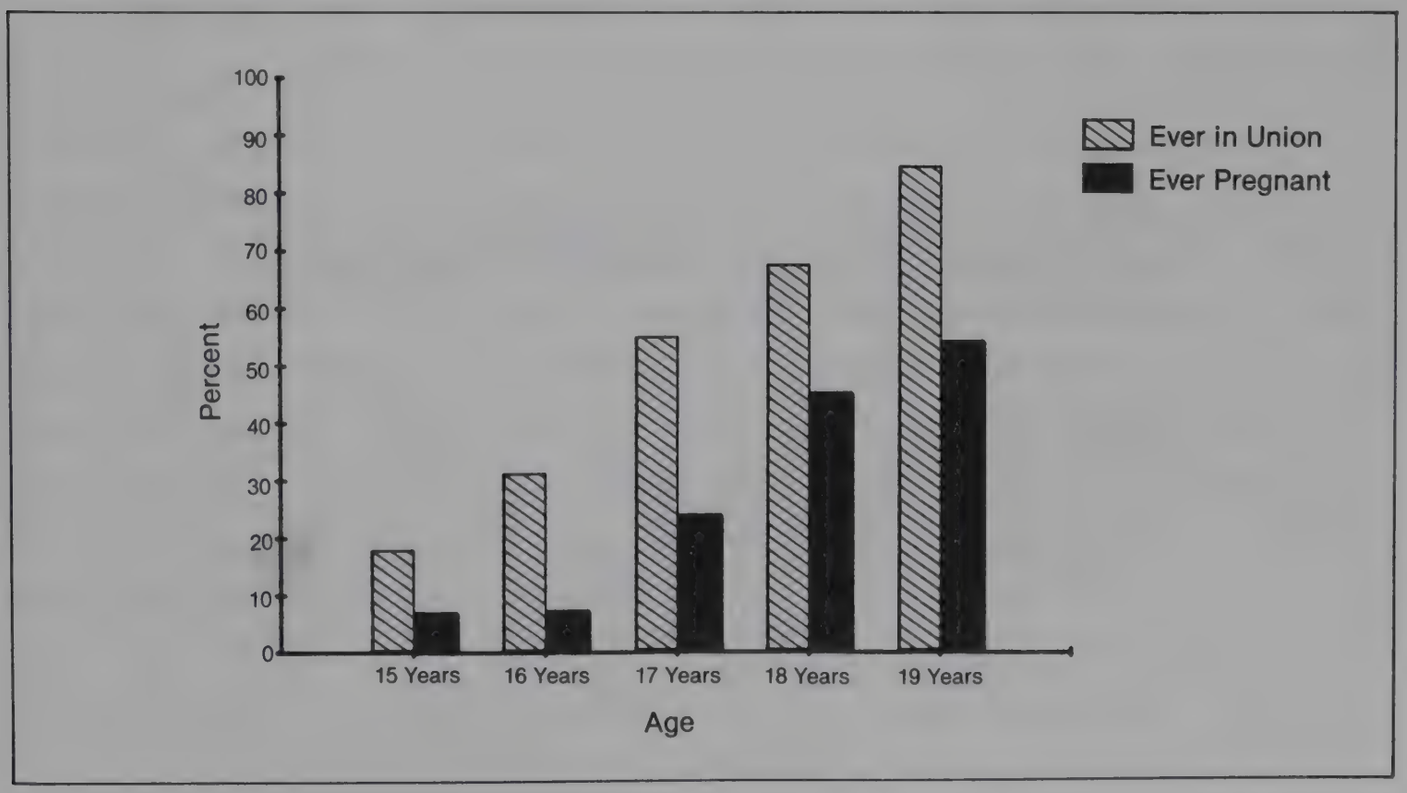
TABLE 6.15

PERCENT DISTRIBUTION OF EVER PREGNANT WOMEN BY COMPARISON OF THEIR ACTUAL AND IDEAL AGES AT AT FIRST PREGNANCY AND AREA OF RESIDENCE, BOTSWANA, 1984

Age at First Pregnancy Comparison	Total	Urban	Rural
Total number	2,496	538	1,958
Total percent	100.0	100.0	100.0
Actual age greater than ideal age	22.8	20.0	23.6
Actual age equals ideal age	17.0	17.7	16.8
Actual age less than ideal age	59.1	61.8	58.4
Not stated	1.1	0.5	1.2

Figure 6.8

COMPARISON OF THE PERCENT EVER IN UNION AND THE PERCENT EVER PREGNANT AMONG TEENAGERS BY SINGLE YEARS OF AGE, Bbotswana, 1984



30 than among older women. Overall, there is a two year difference in the average age at first pregnancy (19 years) and the age these women consider ideal (21 years).

Finally, the BFHS considered the question of the possible detrimental impact of teenage pregnancies on a woman's education by asking ever pregnant women if they were still in school at the time that they became pregnant. Overall, 17 percent of all ever pregnant women were in school when they first became pregnant. Reflecting the generally higher levels of education among women in urban than in rural areas, the percent who became pregnant while they were still attending school was much greater among urban (25 percent) than rural women (14 percent).

6.3.3 Attitudes Toward Reproductive Health Risk Factors

BFHS respondents were asked about whether they thought that it might harm a young woman's health if she had her first child before she was 18 years old. Table 6.16 indicates that two out of every three women in Botswana are aware of the health risks associated with teenage pregnancies. Rural women are as likely as urban women to consider early pregnancies to be potentially harmful for a women's health.

TABLE 6.16

PERCENT DISTRIBUTION OF ALL WOMEN BY WHETHER THEY BELIEVE THAT TEENAGE PREGNANCIES ARE HARMFUL FOR A WOMAN'S HEALTH AND AREA OF RESIDENCE, BOTSWANA, 1984

Opinion About Teenage Pregnancies	Total	Urban	Rural
Total number	3,064	723	2,341
Total percent	100.0	100.0	100.0
Harmful	60.0	61.1	59.6
Not harmful	29.6	28.5	30.0
Not sure/Not stated	10.4	10.4	10.4

TABLE 6.17

PERCENT DISTRIBUTION OF ALL WOMEN BY WHETHER THEY BELIEVE THAT HAVING MANY CHILDREN IS HARMFUL FOR A WOMAN'S HEALTH AND AREA OF RESIDENCE, BOTSWANA, 1984

Opinion About High Parity	Total	Urban	Rural
Total number	3,064	723	2,341
Total percent	100.0	100.0	100.0
Harmful	68.6	69.9	68.2
Not harmful	24.7	22.7	25.3
Not sure/Not stated	6.7	7.4	6.5

BFHS respondents also were asked whether having many children could be harmful to a women's health. Table 6.17 shows that seven out of every ten women in Botswana believe that there are health risks for high parity mothers. Urban and rural women hold generally similar attitudes with respect to the harmful effects of high parity on a woman's health.

Although the attitudinal data in Table 6.16 and 6.17 show a general awareness of the potential health risks for mothers associated with both teenage pregnancies and high parity, around three to four out of every ten women in Botswana do not consider pregnancies before age 18 or high parity as "harmful" for a woman's health. Attitudes also clearly do not always influence behavior as the results indicate that about three out of every ten mothers in Botswana were under age 18 at the time of their first pregnancy and that the average woman will have six births before she completes her childbearing. Further education is obviously needed in these areas.

Chapter 7
KNOWLEDGE, APPROVAL AND EVER USE OF FAMILY PLANNING

SUMMARY: The BFHS results show that eight out of every ten women in Botswana know at least one family planning method and that almost all women knowing about family planning are aware of a source from which they can obtain contraceptive supplies or services.

Approval of the use of family planning services is virtually universal among women knowing a method. However, this positive attitude is not always shared by a woman's partner. A significant minority of currently in union women report that their spouses disapprove of the use of family planning, and, although many couples have talked about family planning, there is again a substantial group of women who have never discussed the subject with their partners.

In view of the widespread knowledge, approval and perceived availability of family planning, it is not surprising that the level of ever use is high. Around one out of two women has used at least one family planning method. The most commonly adopted methods are the pill and abstinence.

The BFHS was designed to provide information on the extent of knowledge and ever use of family planning methods and about the attitudes toward family planning practice among women in Botswana. This chapter presents the major findings of the survey with respect to these topics.

7.1 KNOWLEDGE OF FAMILY PLANNING

The Botswana Family Health Survey measured the level of awareness of family planning methods in two ways:

- Unprompted knowledge: Respondents who said they know or have heard of family planning were first asked, "What family planning methods do you know?" They were recorded as having

unprompted knowledge for each of the methods which they named in response to this question.

Prompted knowledge: When a respondent did not mention a specific method, the interviewer would name but not describe the method and ask if the respondent had heard about the method. This question was asked for each family planning method in order to determine if the respondent knew of methods which she was unwilling or unable to name spontaneously. Women who initially reported that they did not know about family planning were also prompted in this manner.

Prompting was used to collect knowledge data for the following seven modern methods: pill, condom, vaginal methods, injection, IUD, female sterilization and male sterilization. Information was obtained in the same fashion for three traditional methods: calendar (rhythm), withdrawal and abstinence. In addition, provision was made in the questionnaire to record any other folk methods (e.g., herbal belts, etc.) spontaneously named by respondents.

7.1 1 Overall Levels of Knowledge

Three out of every four women in Botswana know at least one family planning method. Women living in urban areas are somewhat more likely than rural women to be aware of family planning methods; the percent knowing at least one family planning method among urban women was 82 percent compared to 73 percent among rural women.

Table 7.1 presents the percentage of women knowing at least one family planning method by marital union status and residence. The table shows that women who have ever been in union are more than twice as likely as women who have never been in union to know at least one family planning method. The comparatively low level of contraceptive knowledge among single women is evident in both urban and rural areas.

TABLE 7.1

PERCENT OF ALL WOMEN KNOWING AT LEAST ONE FAMILY PLANNING METHOD BY MARITAL UNION STATUS AND AREA OF RESIDENCE, BOTSWANA, 1984

Marital Union Status	Total	Urban	Rural
All women	75.3	82.4	73.2
Currently in union	80.6	87.7	78.4
Previously in union	74.4	88.9	70.6
Never in union	35.2	40.3	33.3

7.1.2 Knowledge by Method

In Botswana, knowledge of modern contraceptive methods appears to be more widespread than knowledge of traditional methods. Table 7.2 shows that 78 percent of ever in union women report knowing at least one modern method while only 55 percent say that they know at least one traditional method. In urban areas, a higher percentage of ever in union women are knowledgeable both about modern methods (87 percent) and traditional or folk methods (63 percent) than in rural areas where the two percentages are 75 percent and 52 percent, respectively.

With regard to specific methods, the BFHS results suggest that the most widely known modern contraceptive methods are:

- the pill, known by 77 percent of ever in union women;
- the intra-uterine device (IUD), known by 70 percent of ever in union women; and
- the injection, known by 66 percent of ever in union women.

Table 7.2 shows that the condom is the best known modern method after the pill, IUD and the injection. Around 52 percent of ever in union women

TABLE 7.2

PERCENT OF ALL WOMEN AND EVER IN UNION WOMEN KNOWING FAMILY PLANNING METHODS BY THE SPECIFIC METHOD KNOWN AND AREA OF RESIDENCE, BOTSWANA, 1984

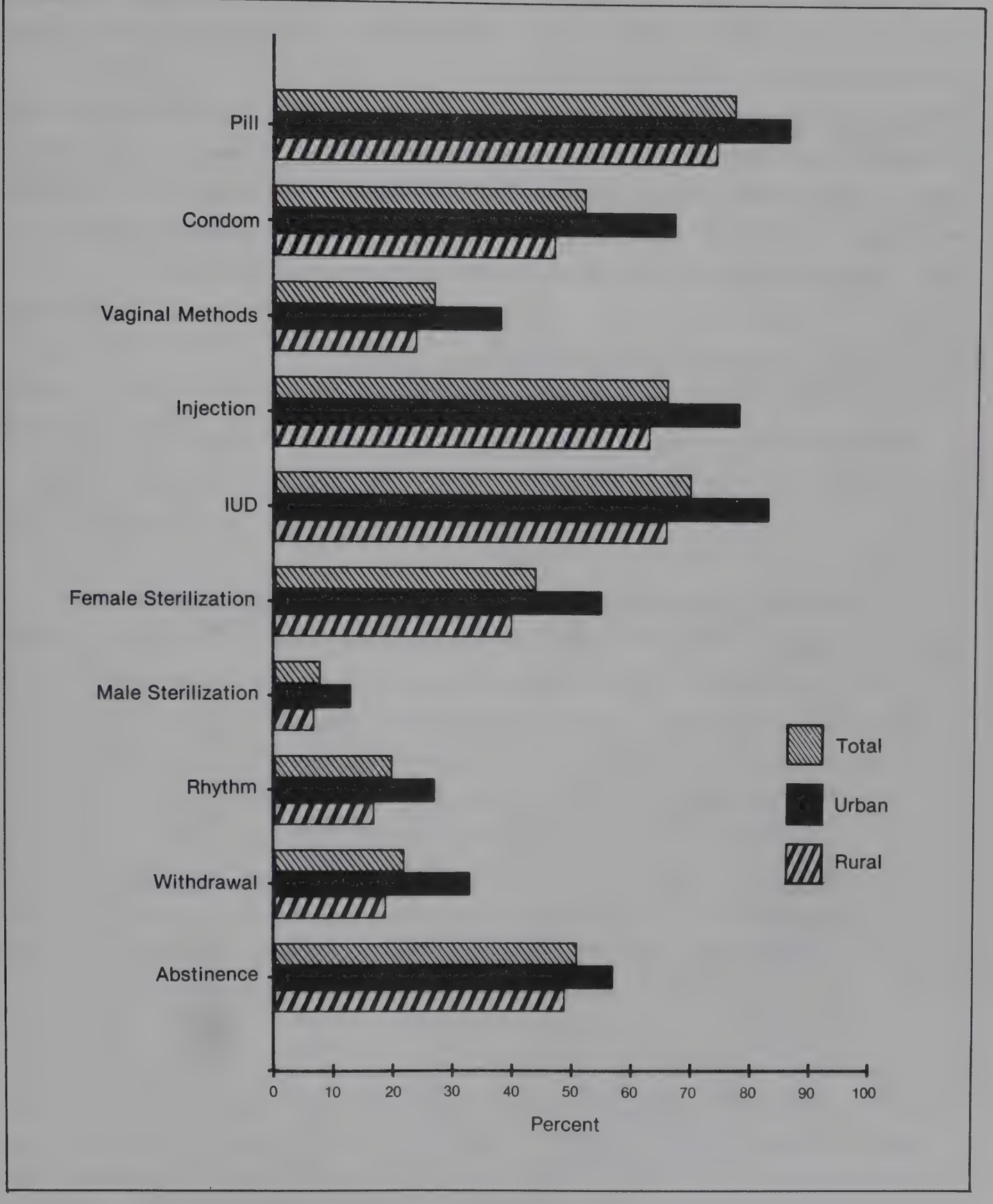
Knowledge of Methods	Total		Urban		Rural	
	All Women	Ever In Union	All Women	Ever In Union	All Women	Ever In Union
Total Number	3,064	2,753	723	641	2,341	2,112
Knows at least one method	75.3	79.9	82.4	87.8	73.2	77.5
Knows at least one modern method	73.8	78.1	81.8	87.2	71.3	75.4
Pill	72.1	76.6	80.3	85.5	69.6	73.9
Condom	48.5	51.7	61.8	66.8	44.4	47.1
Vaginal methods	25.5	27.4	34.7	38.2	22.7	24.2
Injection	61.9	66.4	72.2	78.2	58.7	62.9
IUD	65.6	70.0	77.6	83.3	62.0	66.0
Female sterilization	40.8	43.7	50.8	55.1	37.7	40.2
Male sterilization	8.0	8.3	12.1	12.6	6.8	7.0
Knows at least one traditional method	50.7	54.9	57.7	63.1	48.6	52.4
Calendar (rhythm)	18.3	19.5	24.4	26.6	16.4	17.4
Withdrawal	20.7	22.1	30.3	33.2	17.7	18.8
Abstinence	46.5	50.6	52.0	57.2	44.8	48.6
Other methods	0.5	0.6	0.8	0.9	0.4	0.5

know about the condom compared to only 44 percent knowing about female sterilization and 27 percent knowing about vaginal methods. The least recognized modern method, male sterilization, is known by only 8 percent of all ever in union women in Botswana.

The most widely mentioned traditional method is abstinence, which is recognized by 51 percent of all ever in union women. In comparison,

Figure 7.1

PERCENT OF EVER IN UNION WOMEN KNOWING A FAMILY PLANNING METHOD BY METHOD AND AREA OF RESIDENCE, BOTSWANA, 1984



other traditional methods---withdrawal and the calendar (rhythm) method ---are known only by 22 percent and 20 percent of all women, respectively.

Table 7.2 confirms that levels of knowledge for specific contraceptive methods are uniformly higher among women residing in urban areas than among those living in rural areas. For example, 86 percent of urban ever in union women know about the pill compared to only 74 percent of rural women. Urban-rural differentials are greatest in the case of the condom and least in the case of male sterilization, which is known by only a small percentage of either urban or rural women (Figure 7.1).

7.1.3 Number of Family Planning Methods Known

The number of methods known provides a measure of the breadth of contraceptive knowledge in Botswana. Table 7.3 shows that almost three

TABLE 7.3

PERCENT DISTRIBUTION OF EVER IN UNION WOMEN BY THE NUMBER OF FAMILY PLANNING METHODS KNOWN AND AREA OF RESIDENCE, BOTSWANA, 1984

Number of Methods	Total	Urban	Rural
Total Number	2,753	641	2,112
Total Percent	100.0	100.0	100.0
No methods	20.1	12.2	22.6
1 method	3.2	1.9	3.6
2 methods	4.2	3.3	4.4
3 methods	10.0	7.1	10.8
4 methods	10.6	9.6	10.8
5 methods	12.4	11.5	12.7
6 methods	13.3	14.6	13.0
7 methods	10.1	14.2	8.8
8 methods or more	16.1	25.6	13.3
Mean: All methods	4.4	5.4	4.1
Modern methods	3.4	4.2	3.2
Traditional methods	0.9	1.2	0.9

out of every four ever in union women know at least three contraceptive methods, around two out of every three recognize at least four methods and about one out of every two is familiar with at least five methods. Sixteen percent---one out of every six women---know eight or more methods.

Urban women know about a greater number of methods than rural women. For example, Table 7.3 shows that, in the urban areas, 26 percent of ever in union women know eight methods or more while, in the rural areas, only 13 percent fall in this category. The average urban woman knows more than five modern contraceptive methods while the typical rural woman recognizes only four methods. The urban-rural differential in the number of methods known indicates again that information, education and communication activities targeting rural women should be strengthened to increase their awareness of contraceptive methods.

7.1.4 Differentials in Contraceptive Knowledge

Considering differentials in knowledge levels among various age cohorts, Table 7.4 indicates that the most knowledgeable age group is the 25-29 age group followed, in order, by women in the 30-34, 20-24 and 35-39 age groups. Although ever in union women in the 15-19 year cohort are less likely to know a method than women aged 20-39 years, it is important to note that they are nevertheless quite knowledgeable; 72 percent of women age 15-19 know at least one method. The least knowledgeable age groups are the 40-44 and 45-49 years old; 69 percent and 64 percent, respectively, of ever in union women in these age categories know at least one contraceptive method. Age differentials in contraceptive knowledge are similar in urban and rural areas.

These results suggest that information on contraception has reached the majority of women in the primary target groups, that is, women in the main childbearing years, 20 to 39 years. However, there remains a need for educational efforts to be directed towards teenagers to establish a sound foundation for future use.

TABLE 7.4

PERCENT OF EVER IN UNION WOMEN KNOWING AT LEAST ONE CONTRACEPTIVE METHOD BY SELECTED BACKGROUND CHARACTERISTICS AND AREA OF RESIDENCE, BOTSWANA, 1984

Characteristic	Total	Urban	Rural
Age			
15-19 years	71.9	72.4	71.7
20-24 years	84.2	90.8	81.9
25-29 years	87.5	93.5	85.3
30-34 years	85.4	93.3	82.6
35-39 years	77.6	86.5	75.8
40-44 years	68.9	88.8	65.1
45-49 years	64.0	70.8	63.1
Number of Living Children			
None	67.5	74.0	64.0
1-2 children	83.1	91.8	80.2
3-5 children	84.6	90.8	82.7
6 children or more	73.9	90.0	71.8
Educational Status (Respondent)			
No schooling	66.4	77.0	64.8
Less than primary completed	81.0	87.5	79.4
Primary completed	88.8	88.7	88.8
Some secondary or more	94.7	95.1	94.4
Literacy Status			
Literate	88.1	90.5	87.1
Illiterate	65.7	78.2	63.7
Work Status			
Working	85.1	90.9	81.5
Not working	77.6	84.8	76.2
Religion			
Spiritual/African	82.8	86.2	81.6
Protestant	87.3	90.2	86.1
Catholic	85.5	90.0	84.0
Other religion	77.1	90.8	73.5
None	70.1	86.1	67.1
Educational Status (Partner)*			
No schooling	73.3	81.0	72.2
Less than primary completed	81.6	90.5	79.2
Completed primary	84.8	84.4	85.0
Some secondary and above	91.9	94.0	90.3
Not sure/Not stated	78.6	83.9	76.7

* Refers only to currently in union women.

Looking at the patterns with respect to the number of living children, the group that has no children is the least knowledgeable. Only 68 percent of women having no children know about family planning compared to 85 percent among the most knowledgeable group of women, those who have 3-5 living children. Knowledge levels tend to be somewhat lower among women who have 6 children or more; only 74 percent of women in this category know a method. This may be related to the age of women; higher parity women are likely to be older and, as discussed above, less likely to know about contraceptive methods.

Educational achievement is clearly related to contraceptive knowledge. Those ever in union women who have at least some secondary education are most likely to know a contraceptive method followed, in order, by those who have completed primary school, those who attended but have not completed primary school and those women who have never been to school. The percentage knowing at least one method ranges from only 66 percent among ever in union women never attending school to 95 percent among those ever attending secondary school. The pattern is similar for both the rural and urban women.

Ever in union women who are able to read are more likely to be knowledgeable about contraceptives than those who are illiterate. Overall, 88 percent of literate women know at least one family planning method compared to 66 percent of illiterate women. In the urban areas, 90 percent of those who are literate are knowledgeable about contraceptives against only 78 percent of those who are illiterate. In the rural areas, 87 percent of those women who are literate know about contraceptives as against 64 percent of those who are illiterate.

A woman's work status also is related to the level of contraceptive knowledge. Women who work for pay are somewhat more knowledgeable about family planning methods than women who are not holding a job for which they are paid (85 percent vs. 78 percent, respectively). Work status differentials among urban and rural women exhibit a similar pattern.

There appears to be only a slight relationship between contraceptive knowledge and a woman's religious affiliation. On the whole, Protestant women are the most knowledgeable followed by Roman Catholic women and women belonging to Spiritual/African churches. Those that belong to no religion are least knowledgeable. Differentials in the levels of knowledge among religious groups are more evident among rural than urban women.

Among currently in union women, the level of contraceptive knowledge methods increases with the educational level of their partners. Overall, the percent knowing at least one method varies from a low of 73 percent among women whose partners never attended school to 92 percent among women whose partners had some secondary education. This pattern is similar for both urban and rural women, although the increase is not uniformly positive across all educational categories for urban areas.

7.2 KNOWLEDGE OF A SOURCE

Respondents were also asked if they knew about a source from which they could obtain family planning information or services. Table 7.5

TABLE 7.5

PERCENT DISTRIBUTION OF ALL WOMEN AND EVER IN UNION WOMEN BY KNOWLEDGE OF A SOURCE FROM WHICH FAMILY PLANNING INFORMATION AND SERVICES CAN BE OBTAINED AND AREA OF RESIDENCE, BOTSWANA, 1984

Knowledge of a Source	Total		Urban		Rural	
	All Women	Ever In Union	All Women	Ever In Union	All Women	Ever In Union
Total Number	3,064	2,753	723	641	2,341	2,112
Total Percent	100.0	100.0	100.0	100.0	100.0	100.0
Knows method and source	68.8	73.4	77.9	83.2	66.1	70.4
Knows method but not source	6.5	6.5	4.5	4.6	7.1	7.1
Does not know any method	24.7	20.1	17.6	12.2	26.8	22.5

indicates that 73 percent of all ever in union women---92 percent of those women knowing at least one family planning method---are able to name a source from which family planning services can be obtained. In urban areas, 83 percent of all ever in union women---95 percent of those knowing at least one method---know about a family planning service provider. In rural areas, 70 percent of all ever in union women---90 percent of those knowing at least one method---are able to name a source for contraceptive methods. The types of sources from which women obtain family planning services and the comparative accessibility of service providers is examined in more detail in Chapter 9 of this report.

7.3 APPROVAL OF FAMILY PLANNING

Information was collected regarding whether women approve of the use of contraceptive methods and whether currently in union women think that their partners approve of family planning. The results indicate that almost all women in Botswana who know about family planning approve of a couple using contraceptive methods. Table 7.6 shows that less than three percent of all ever in union women disapprove of the use of contraception.

TABLE 7.6

PERCENT DISTRIBUTION OF WOMEN AND EVER IN UNION WOMEN BY OPINION WITH REGARD TO THE USE OF FAMILY PLANNING BY A COUPLE AND AREA OF RESIDENCE, BOTSWANA, 1984

Opinion About Family Planning	Total		Urban		Rural	
	All Women	Ever In Union	All Women	Ever In Union	All Women	Ever In Union
Total Number	3,064	2,753	723	641	2,341	2,112
Total Percent	100.0	100.0	100.0	100.0	100.0	100.0
Approves	71.2	75.6	78.3	83.8	69.0	73.1
Disapproves	2.7	2.8	2.6	2.5	2.8	2.9
Says it depends	0.4	0.4	0.5	0.6	0.3	0.4
Not sure/Not stated	1.0	1.0	1.1	1.0	1.0	1.1
Does not know any method	24.6	20.1	17.5	12.1	26.8	22.5

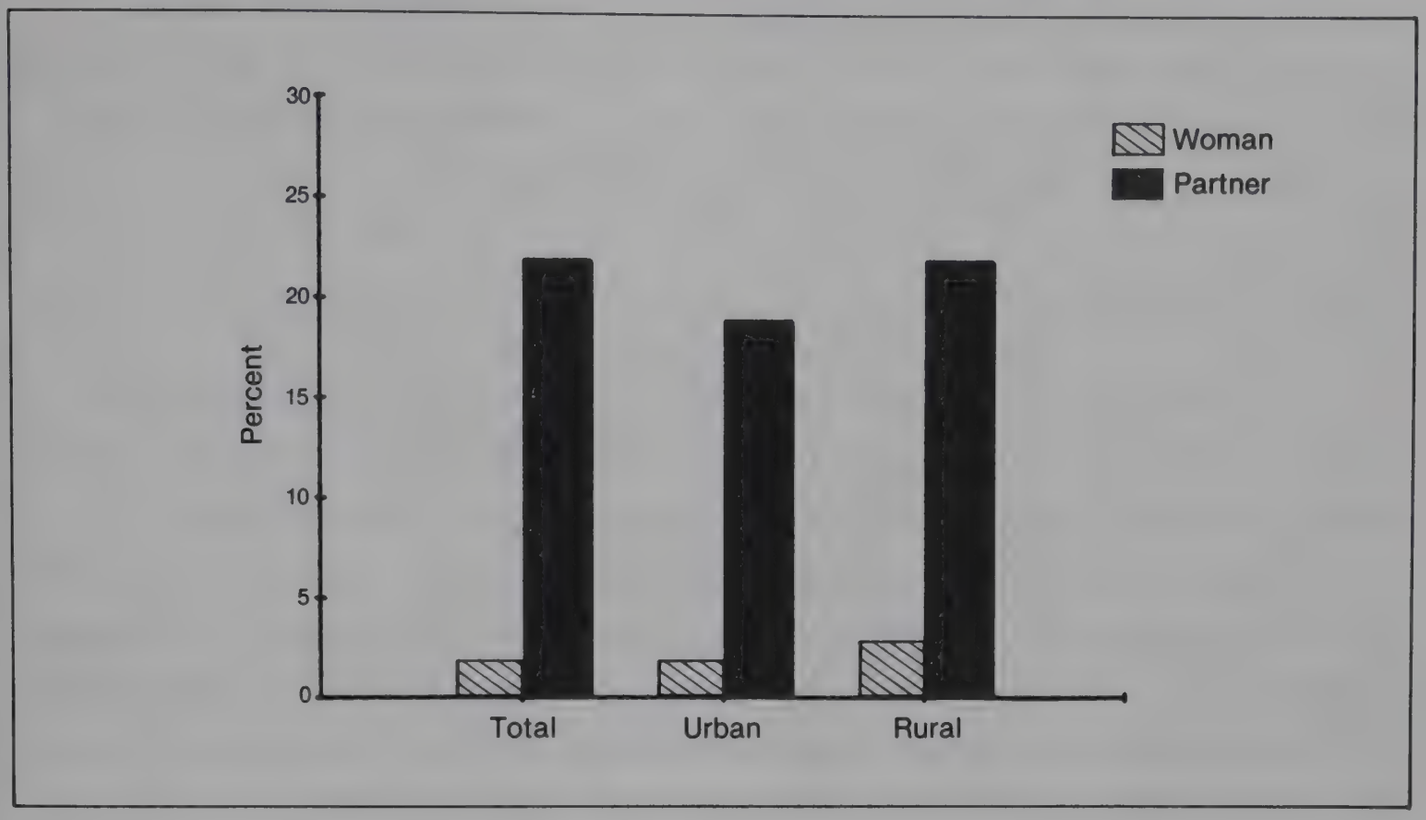
Table 7.7 shows the distribution of currently in union women according to the attitude they believe that their partners hold with regard to family planning. A comparison of a woman's own attitude with her perception of her partner's opinion indicates that, while only 2 percent of all currently in union women themselves disapprove of the practice of family planning, 22 percent think that their partners disapprove of the use of contraceptive

TABLE 7.7

PERCENT DISTRIBUTION OF CURRENTLY IN UNION WOMEN BY PARTNER'S OPINION ABOUT FAMILY PLANNING, THE NUMBER OF TIMES FAMILY PLANNING WAS DISCUSSED WITH THE PARTNER AND AREA OF RESIDENCE, BOTSWANA, 1984

	Total	Urban	Rural
Total Number	2,433	576	1,857
Partner's Opinion About Family Planning			
Total Percent	100.0	100.0	100.0
Approves	38.5	49.0	35.2
Disapproves	21.7	19.4	22.4
Says it depends	2.0	2.2	2.0
Says it doesn't matter	4.5	5.2	4.3
Not sure	13.9	11.8	14.6
Doesn't know any method	19.4	12.3	21.5
Number of Times Discussed With Partner			
Total Percent	100.0	100.0	100.0
Never	34.0	30.9	34.9
Once or twice	27.7	35.4	25.3
Three or four times	18.9	21.4	18.2
Not stated	0.0	0.1	0.0
Does not know any method	19.4	12.3	21.6

Figure 7.2
COMPARISON OF THE PERCENT OF CURRENTLY IN UNION WOMEN DISAPPROVING OF FAMILY PLANNING USE AND THE PERCENT SAYING THAT THEIR PARTNERS DISAPPROVE OF FAMILY PLANNING USE, BOTSWANA, 1984



methods (Figure 7.2). Rural women are only slightly more likely than urban women to believe that their partners disapprove of family planning.

Table 7.7 also looks at the issue of how often women have talked with their partners about family planning in the past year. Overall, 53 percent of all currently in union women have never discussed family planning with their partners, 28 percent have talked about the subject at least once or twice and 19 percent have had three or four conversations about family planning with their spouses during the past year. Urban women are more likely than rural women to have discussed family planning with their partners; 57 percent of urban women have had at least one conversation about family planning with their partners in the last year compared to 44 percent of rural women

7.4 EVER USE OF FAMILY PLANNING

Information was collected in the BFHS on the ever use of family planning methods by asking a respondent if she had ever used each of the methods which she knew. These data allow an investigation of the overall level of experience with contraceptive use in Botswana with particular emphasis on the type of methods that women have used.

7.4.1 Overall Levels of Ever Use

The BFHS results discussed earlier in this chapter indicate the majority of women in Botswana in both urban and rural areas know about family planning, approve of its use and can name a source where contraceptive information and services are available. The level of ever use of contraceptive methods also is quite high among women in Botswana (Figure 7.3). Around one out of every two women (48 percent) has used a method at one time. More women in the urban areas (57 percent) than in the rural areas (45 percent) have ever used contraception.

Figure 7.3
COMPARISON OF LEVELS OF METHOD KNOWLEDGE, SOURCE KNOWLEDGE, APPROVAL AND EVER USE OF FAMILY PLANNING AMONG ALL WOMEN BY AREA OF RESIDENCE, BOTSWANA, 1984

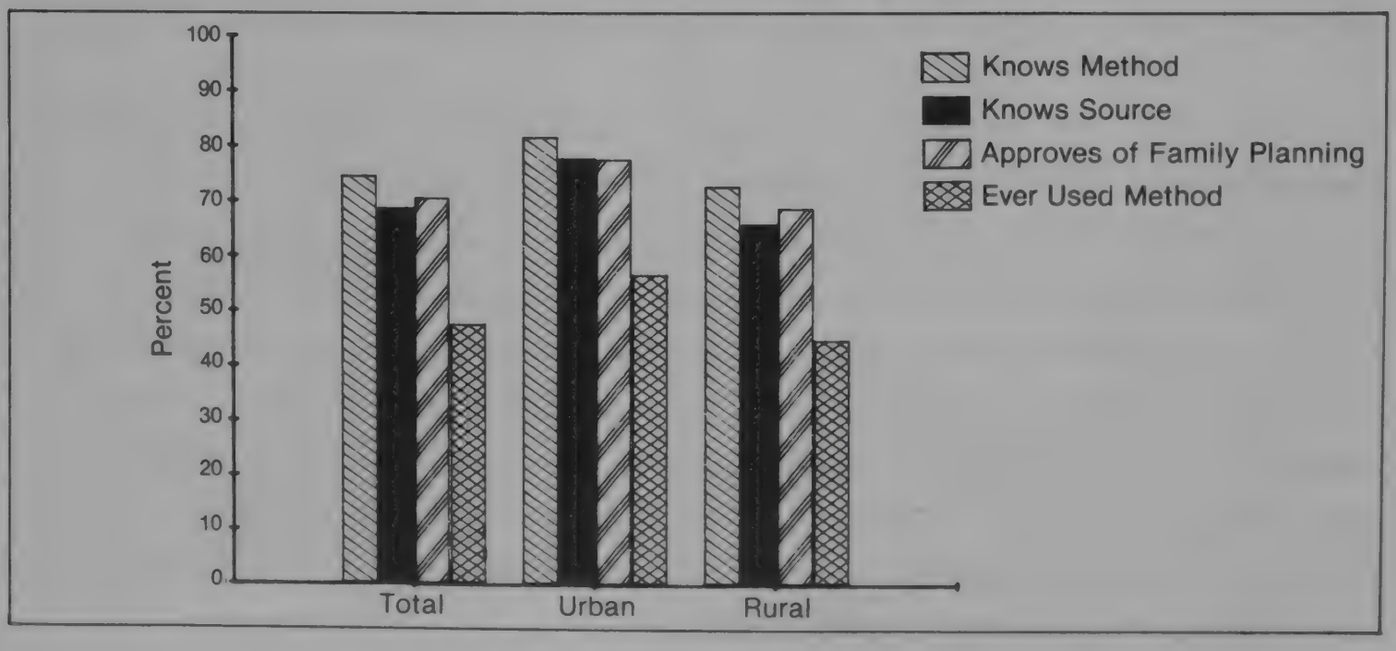


TABLE 7.8

PERCENT OF ALL WOMEN EVER USING AT LEAST ONE FAMILY PLANNING METHOD BY MARITAL UNION STATUS AND AREA OF RESIDENCE, BOTSWANA, 1984

Marital Union Status	Total	Urban	Rural
All women	48.0	56.7	45.2
Currently in union	54.2	64.3	51.0
Previously in union	42.2	55.6	38.7
Never in union	5.3	4.4	5.6

Table 7.8 shows the percentage of women ever using at least one family planning method by marital union status. The percentage of women ever using family planning is somewhat greater among currently in union women (54 percent) than among women who were separated, divorced or widowed and not living with a partner at the time of the survey (42 percent). This pattern likely reflects the age differences between these two groups; previously in union women are older on average than currently in union women and, thus, as will be discussed later in this section, less likely to have ever adopted a family planning method. The low level of ever use among never in union women is obviously related to the fact that most women in this group are young and not yet sexually active. An examination of the urban-rural differentials in the percentage ever using contraception among the marital union groups indicates that urban women are more likely to have ever used contraception than rural women except in the case of never in union women.

7.4.2 Ever Use by Method

Around one out of every three women in Botswana has ever used a modern contraceptive method. Table 7.9 indicates that the most commonly

used modern method in Botswana is the pill. Thirty percent of ever in union women have ever used the pill. Experience with other modern methods is more limited (Figure 7.4). The percentage of ever in union women reporting ever use of the IUD is only nine percent while seven percent have ever used the condom, five percent have relied on injection and one percent have had a sterilization. Less than one percent have ever used vaginal methods, and only one woman reported that her partner had had a vasectomy.

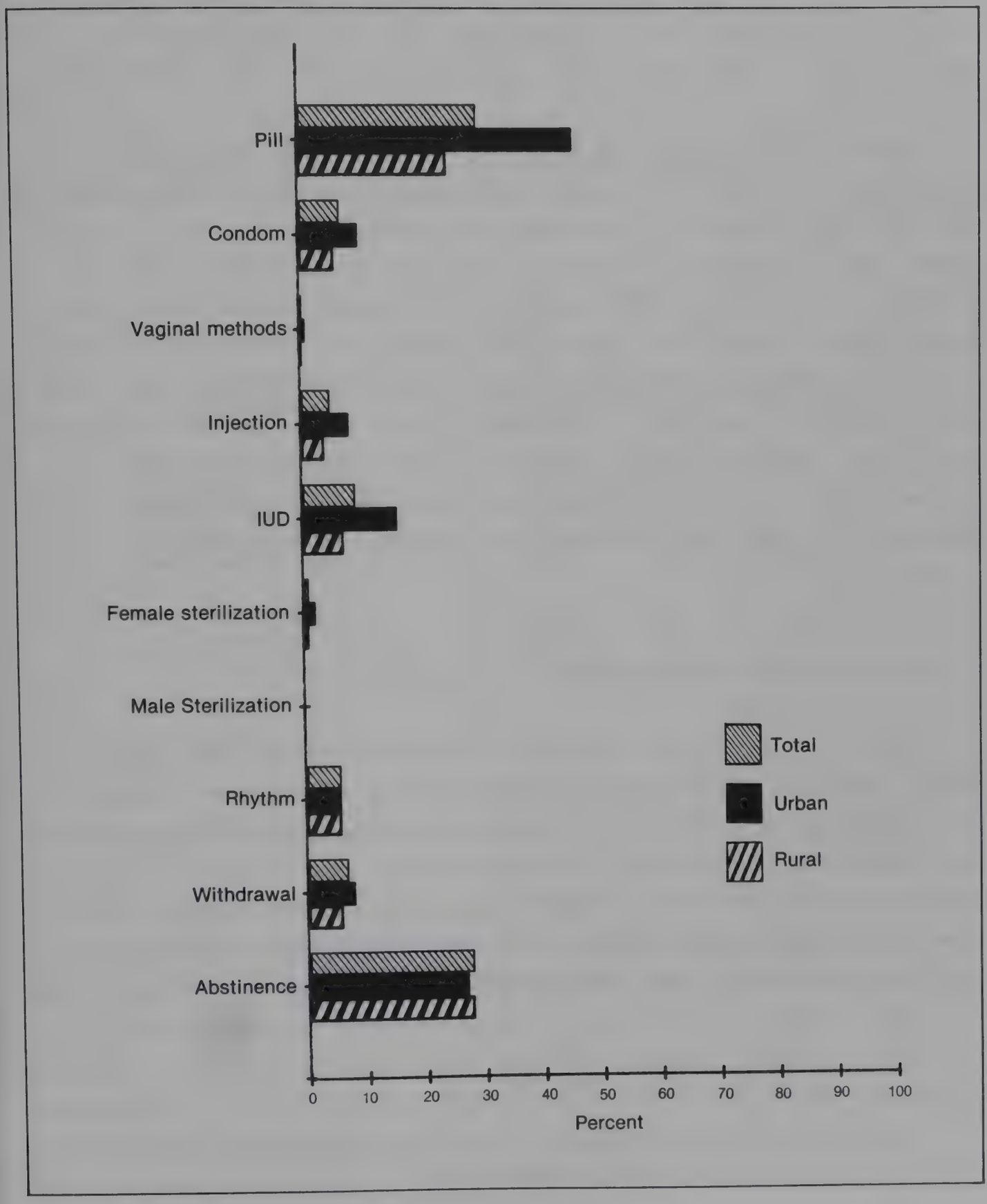
TABLE 7.9

PERCENT OF ALL WOMEN AND EVER IN UNION WOMEN EVER USING FAMILY PLANNING METHODS BY THE SPECIFIC METHOD EVER USED AND AREA OF RESIDENCE, BOTSWANA, 1984

Method Ever Used	Total		Urban		Rural	
	All Women	Ever In Union	All Women	Ever In Union	All Women	Ever In Union
Total Number	3,064	2,753	723	641	2,341	2,112
Ever used at least one method	48.0	52.8	56.7	63.4	45.2	49.5
Ever used at least one modern method	33.9	37.3	47.5	53.1	29.8	32.5
Pill	27.2	29.9	41.1	46.0	23.0	25.1
Condom	6.4	7.0	8.9	10.0	5.6	6.1
Vaginal methods	0.4	0.4	0.7	0.8	0.3	0.3
Injection	4.8	5.3	7.4	8.3	3.9	4.4
IUD	8.5	9.3	14.5	16.3	6.7	7.2
Female sterilization	1.2	1.4	1.4	1.6	1.2	1.3
Male sterilization	0.0	0.0	0.1	0.0	0.0	0.0
Ever used at least one traditional method	28.1	31.0	27.8	31.3	28.2	30.9
Calendar (rhythm)	5.2	5.6	5.2	5.9	5.2	5.6
Withdrawal	6.2	6.7	6.7	7.5	6.0	6.5
Abstinence	25.1	27.8	24.4	27.4	25.3	27.9
Other methods	0.4	0.4	0.6	0.6	0.3	0.4

Figure 7.4

PERCENT OF EVER IN UNION WOMEN EVER USING A FAMILY PLANNING METHOD BY METHOD AND AREA OF RESIDENCE, BOTSWANA, 1984



Ever use of traditional methods is fairly widespread in Botswana. Thirty-one percent of ever in union women have ever used a traditional method. Abstinence is the most widely used traditional method---about one out of every four ever in union women has ever used abstinence---follow by withdrawal (7 percent) and the calendar (rhythm) method (6 percent)[1].

Urban women are much more likely than rural women to have ever used most modern methods. For example, in urban areas, slightly less than one out of every two ever in union women have used the pill while, in rural areas, only around one out of every four ever in union women has ever used the pill. Similar differentials are observed in the case of other modern methods except for female sterilization and vaginal methods where the overall level of ever use is very low in both urban and rural areas. Urban-rural differentials in the level of ever use of traditional methods are not as large as those for modern methods. For example, the percentage of ever in union women ever using abstinence is almost identical in urban and rural areas (27 percent and 28 percent, respectively).

7.4.3 Number of Methods Ever Used

Table 7.10 shows that, among ever in union women who have ever used family planning, the majority (54 percent) have used only one method. The percentage ever using two methods is 24 percent while 13 percent have ever used three methods and 8 percent have used four or more methods. The percentage ever using more than one method is greater among urban than rural women; 56 percent of urban women who have ever used family planning have used at least two methods compared to only 42 percent among

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[1] Additional information collected in the BFHS regarding the practice of abstinence in the postpartum period is reviewed in Chapter 5.

rural women. The mean number of methods ever used by women who have practiced contraception is 1.8. The mean among urban ever users is 2.0 methods while among rural ever users it is 1.7 methods.

TABLE 7.10

PERCENT DISTRIBUTION OF EVER IN UNION WOMEN WHO HAVE EVER USED CONTRACEPTIVE METHODS BY NUMBER OF METHODS EVER USED AND AREA OF RESIDENCE, BOTSWANA, 1984

Number of Methods	Total	Urban	Rural
Total Number	1,453	407	1,046
Total Percent	100.0	100.0	100.0
One method	54.0	43.7	57.9
Two methods	24.6	30.5	22.3
Three methods	13.4	16.0	12.5
Four methods	5.9	6.6	5.6
Five methods or more	2.1	3.2	1.7
Mean: All methods	1.8	2.0	1.7
Modern methods	1.0	1.3	0.9
Traditional methods	0.8	0.7	0.8

7.4.4 Differentials in Ever Use of Contraception

Table 7.11 examines differentials in the levels of ever use of family planning methods by selected background characteristics. The table shows that levels of ever use are greatest among ever in union women in the 25-34 year age cohorts, among those with 3 to 5 living children, among those who are literate, among those who have attended secondary school or whose partner attended secondary school and among those affiliated with Spiritual African, Protestant or Catholic churches. The pattern of differentials in the levels of ever use is similar in urban and rural

TABLE 7.11

PERCENT OF EVER IN UNION WOMEN EVER USING AT LEAST ONE FAMILY PLANNING METHOD BY SELECTED BACKGROUND CHARACTERISTICS AND AREA OF RESIDENCE, BOTSWANA, 1984

Characteristic	Total	Urban	Rural
Age			
15-19 years	29.9	28.6	30.4
20-24 years	55.9	65.5	52.6
25-29 years	64.7	77.2	60.2
30-34 years	60.8	75.7	55.6
35-39 years	53.8	67.5	51.1
40-44 years	47.3	65.3	43.8
45-49 years	33.5	37.5	33.0
Number of Living Children			
None	20.0	24.9	17.3
1-2 children	56.4	72.1	51.3
3-5 children	64.2	75.5	60.8
6 children or more	49.4	68.3	47.0
Educational Status (Respondent)			
No schooling	40.4	52.2	38.5
Less than primary completed	52.2	65.1	49.1
Primary completed	61.8	60.8	62.2
Some secondary or more	68.7	73.0	65.5
Literacy Status			
Literate	60.2	66.3	57.8
Illiterate	39.8	52.5	37.8
Work Status			
Working	66.0	72.9	61.7
Not working	46.9	53.9	45.6
Religion			
Spiritual/African	57.5	60.7	56.3
Protestant	57.4	66.3	54.0
Catholic	60.1	71.4	56.3
Other religion	48.4	63.2	44.6
None	42.8	61.1	39.3
Educational Status (Partner)*			
No schooling	42.7	57.8	40.4
Less than primary completed	55.6	64.8	53.4
Completed primary	60.8	63.4	59.9
Some secondary and above	70.8	71.8	69.9
Not sure/Not stated	47.0	55.6	73.5

* Refers only to currently in union women.

areas although it is again important to note that, in most population subgroups, urban women are more likely to have ever used contraception than rural women.

Of particular note in Table 7.11 is the comparatively low level of contraceptive usage among women in the 15-19 year cohort. Only 30 percent of women in this age group have ever used family planning. In view of the fact that Botswana has a serious problem with respect to unwanted pregnancies among adolescents, it is important to consider ways in which contraceptive use can be increased among these teenagers in order to postpone unwanted adolescent pregnancies.

7.5 EFFECTIVE UTILIZATION OF THE PILL AND IUD

Respondents who had ever used the pill or the IUD were asked a number of questions designed to measure their understanding of how to avoid accidental pregnancies. Table 7.12 shows that, not surprisingly, knowledge of how to use the pill is nearly universal among women who have ever used the pill. However, these women are somewhat less likely to know what to do if they forget to take the pill for one day; only 85 percent of all pill ever users know that they should take two pills the next day if they forget to take a pill. Rural ever users (83 percent) are somewhat more likely than urban ever users (90 percent) to be uncertain about the correct action to take if they forget a pill for one day.

Table 7.12 also shows that pill ever users are much more uncertain about what to do if they forget to take the pill for 3 or 4 days. Overall, 47 percent report they are not sure about what to do, 34 percent say they would consult a doctor or nurse and 5 percent would start using another method. Urban pill ever users do not differ greatly from rural pill ever users with regard to the action that they would take if they missed taking the pill for 3 to 4 days.

With regard to the IUD, Table 7.13 indicates that almost all ever users of the IUD know where the method is placed in a woman's body. Most

TABLE 7.12

PERCENT DISTRIBUTION OF EVER IN UNION WOMEN EVER USING THE PILL BY KNOWLEDGE OF HOW TO USE PILL CORRECTLY TO AVOID PREGNANCY, ACTION TAKEN IF PILL MISSED FOR 1 DAY, ACTION TAKEN IF PILL MISSED FOR 3-4 DAYS AND AREA OF RESIDENCE, BOTSWANA, 1984

Pill Knowledge Indicators	Total	Urban	Rural
Total number	825	295	530
How to use pill correctly to avoid pregnancy			
Total percent	100.0	100.0	100.0
Take one pill per day	99.5	99.1	99.7
Other/not stated	0.5	0.9	0.3
Action taken if pill missed for one day			
Total percent	100.0	100.0	100.0
Take two pills	85.3	90.1	82.6
Just continue 1 pill per day	2.3	1.7	2.7
Not sure	11.9	7.9	14.1
Not stated	0.5	0.3	0.6
Action taken if pill missed 3-4 days			
Total percent	100.0	100.0	100.0
Start using another method	5.2	4.8	5.4
Consult doctor or nurse	34.4	28.2	37.8
Take 3-4 pills	12.6	16.0	10.9
Not sure	47.0	49.9	45.3
Not stated	0.8	1.1	0.6

TABLE 7.13

PERCENT DISTRIBUTION OF EVER IN UNION WOMEN EVER USING THE IUD BY KNOWLEDGE OF WHERE THE IUD IS PLACED AND OF HOW TO TELL IF THE IUD IS POSITIONED CORRECTLY AND AREA OF RESIDENCE, BOTSWANA, 1984

IUD Knowledge Indicators	Total	Urban	Rural
Total number	257	105	153
Knowledge of where IUD is placed			
Total percent	100.0	100.0	100.0
Uterus, womb, etc.	99.4	100.0	99.0
Not sure	0.6	0.0	1.0
Knowledge of how to tell if IUD is positioned correctly			
Total percent	100.0	100.0	100.0
Feel thread with finger	92.7	95.7	90.6
Other	2.2	0.9	3.1
Not sure	4.9	3.0	6.3
Not stated	0.2	0.4	0.0

ever users (93 percent) are also aware of how to determine whether the IUD is correctly positioned. Rural ever users are only slightly less likely than urban ever users to know how to check on the positioning of the IUD.

Chapter 8
CURRENT USE

SUMMARY: The contraceptive prevalence rate in Botswana is among the highest in SubSaharan Africa; 28 percent of currently in union women are presently practicing family planning. Two-thirds of all current users are relying on modern contraceptive methods, primarily the pill and the IUD. Almost all traditional method users are practicing abstinence.

Current use is greater among urban than rural women. Differentials in use also favor women in the 20-39 age cohorts, women with 3-5 children, women who are literate, especially those with a secondary education, women whose partners are well-educated, women working for pay and Catholic and Protestant women.

In general, current users appear to be satisfied with the methods that they are using. With respect to continuation, the results suggest that IUD users have the longest median duration of use---around two years---followed by users of the pill and abstinence. The shortest average (median) duration of use---7 months---is observed for injection users. Experience or concern about side effects and the desire to have another child are the principal reasons former users of the pill, the IUD and injection give for discontinuing use of these methods.

Among nonusers, the primary reasons for nonuse are lack of information about family planning and lack of exposure to the risk of pregnancy. The majority of nonusers would consider using contraception in the future with the pill being the preferred method. Almost all nonusers would like more information about family planning.

Around one out of every six currently in union women is in immediate need of family planning, i.e., she wants to limit or space births and she is exposed to the risk of pregnancy but not using contraception. Over 70 percent of women in immediate need of family planning fall into one or more of the high reproductive health risk categories (under 18, over 35, with four births or with a birth within the past two years). In addition, the BFHS results indicate that around one out of every four currently in union women, while not presently exposed to the risk of pregnancy, wants to space or limit future births and, as a consequence, may be in need of family planning services as her exposure status changes.

Among the most important data collected in the BFHS was the information regarding the levels and patterns of use of contraceptive methods. This chapter presents these results, focusing first upon women using family planning at the time of the survey and then upon nonusers.

8.1 PREVALENCE OF FAMILY PLANNING USE

All women knowing at least one contraceptive method were asked about whether they were using, or had used during the month prior to the BFHS interview, any method to avoid or postpone a pregnancy. Their responses provide a measure of the prevalence of family planning use in Botswana.

8.1.1 Overall Prevalence Levels

Table 8.1 shows the percent of all women using family planning by marital status. The table indicates that 24 percent of all women age 15-49 in Botswana are using family planning. Among currently in union women, 28 percent are reported as currently using family planning. The proportions using family planning among previously in union and never in union women---who presumably are not immediately exposed to the risk of pregnancy---are 11 percent and 3 percent, respectively.

TABLE 8.1

PERCENT OF ALL WOMEN CURRENTLY USING FAMILY PLANNING BY MARITAL UNION STATUS AND AREA OF RESIDENCE, BOTSWANA, 1984

Marital Union Status	Total	Urban	Rural
All women	23.5	31.3	21.1
Currently in union	27.8	37.1	24.9
Previously in union	11.0	17.4	9.4
Never in union	3.0	1.7	3.5

Except among single women, Table 8.1 indicates that there is a substantial difference between urban and rural areas in the prevalence of contraceptive use. Overall, the percentage of urban women currently using family planning is 31 percent while, among rural women, only 21 percent are using. The comparable figures for currently in union women in urban and rural areas are 37 percent and 25 percent, respectively.

8.1.2 Prevalence by Method

Table 8.2 shows that 19 percent of all currently in union women are using a modern method. Among users relying on modern methods, the pill

TABLE 8.2

PERCENT DISTRIBUTION OF ALL WOMEN AND CURRENTLY IN UNION WOMEN BY THE METHOD CURRENTLY USED AND AREA OF RESIDENCE, BOTSWANA, 1984

Current Use	Total		Urban		Rural	
	All Women	Currently in Union	All Women	Currently in Union	All Women	Currently in Union
Total Number	3,064	2,433	723	576	2,341	1,857
Total Percent	100.0	100.0	100.0	100.0	100.0	100.0
Any method	23.5	27.8	31.3	37.1	21.1	24.9
Any modern method	16.0	18.6	25.4	29.8	13.2	15.1
Pill	8.5	10.0	14.3	16.8	6.7	7.9
Condom	1.0	1.2	1.3	1.6	1.0	1.0
Vaginal methods	0.1	0.1	0.1	0.1	0.1	0.1
Injection	1.1	1.0	1.9	2.1	0.8	0.7
IUD	4.1	4.8	6.3	7.4	3.4	4.0
Female sterilization	1.2	1.5	1.4	1.7	1.2	1.4
Male sterilization	0.0	0.0	0.1	0.1	0.0	0.0
Any traditional method	7.5	9.2	5.9	7.3	7.9	9.8
Rhythm	0.3	0.3	0.2	0.2	0.3	0.3
Withdrawal	0.3	0.3	0.3	0.2	0.3	0.3
Abstinence	6.8	8.5	5.3	6.7	7.2	9.1
Other	0.1	0.1	0.1	0.2	0.1	0.1
Not using any method	76.5	72.2	68.7	62.9	78.9	75.1

is the most commonly used method followed by the IUD; ten percent of all currently in union women use the pill while five percent rely on an IUD. The percentage using other modern methods ranges from less than one percent in the case of vaginal methods to around two percent in the case of female sterilization (Figure 8.1).

Table 8.2 also shows that, overall, nine percent of all currently in union women were using a traditional method. Abstinence is the most popular traditional method. Eight percent of all currently in union women are using abstinence.[1]

8.1.3 Prevalence Differentials

Table 8.3 examines differentials in the percentage of currently in union women currently using family planning by selected background characteristics. These results indicate that contraceptive use in Botswana is somewhat more widespread among women under 30 years than among older women. According to the figures, while there is a marked increase in percentage of women using family planning between the 15-19 and the 20-24 age cohorts; thereafter, the increment is marginal as age increases until the percentage using begins to decline among women aged 35-39 years. This pattern is generally observed for both urban and rural women. The fact that current users of contraceptive methods are concentrated in the younger age groups (20-34 years) may be attributed to the fact that Botswana's family planning programme is relatively new. This relationship also may reflect the fact that younger women are more receptive than older women to family planning use.

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[1] Includes only women reporting that they were using abstinence for contraceptive purposes. Women who reported that they had not yet resumed sexual relations during the postpartum period are not included unless they indicated that they were using abstinence to avoid a pregnancy. A total of 186 currently in union women --8 percent of all currently in union women---had not yet resumed sexual relations with their partner but did not report they were using abstinence as a contraceptive method. Among currently in union women in urban areas, 6 percent fell into this category compared to 8 percent in rural areas.

Figure 8.1
PERCENT DISTRIBUTION OF CURRENTLY IN UNION WOMEN BY THE CONTRACEPTIVE METHOD CURRENTLY USED AND AREA OF RESIDENCE, BOTSWANA, 1984

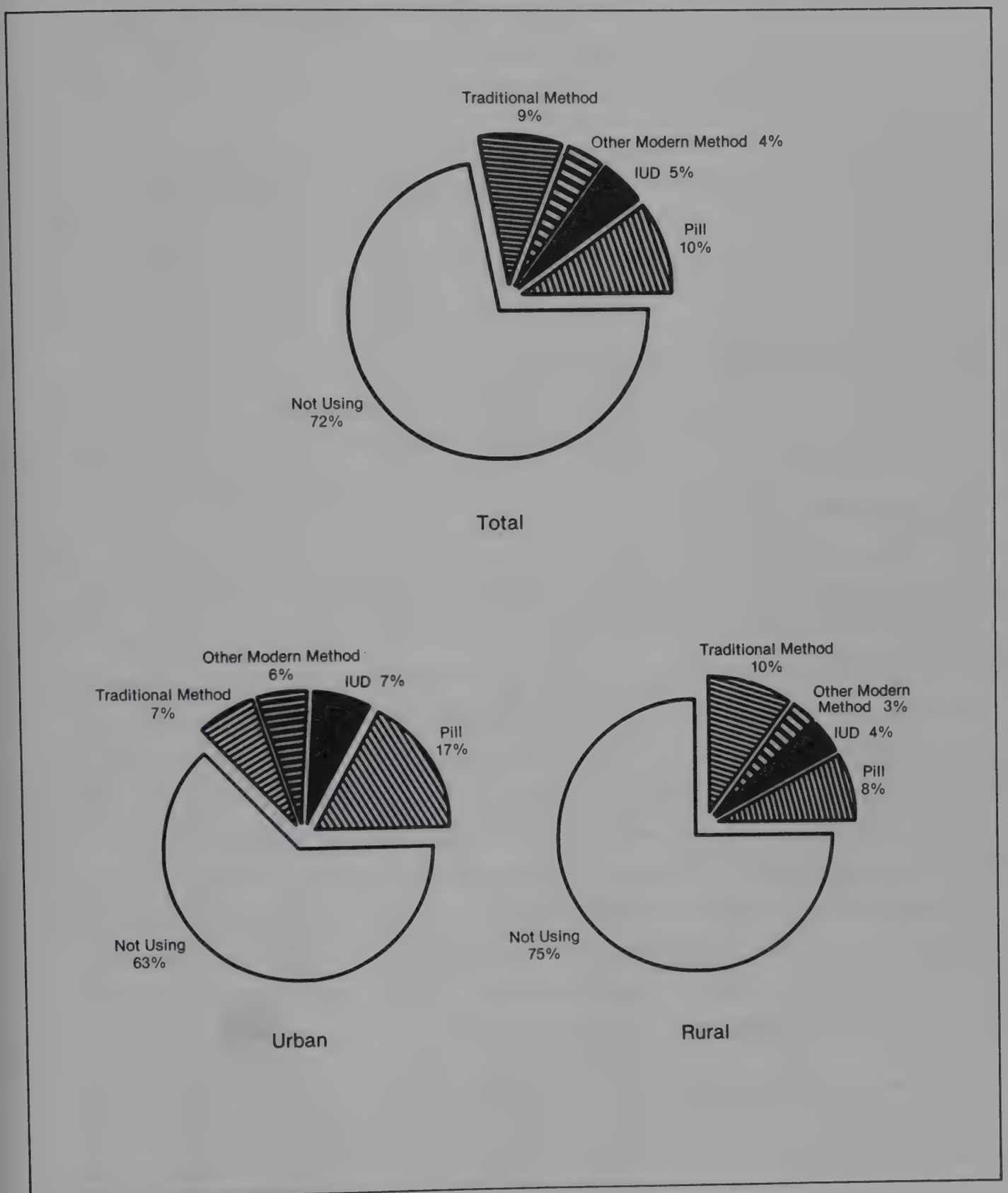


TABLE 8.3

PERCENT OF CURRENTLY IN UNION WOMEN CURRENTLY USING FAMILY PLANNING BY SELECTED BACKGROUND CHARACTERISTICS, TYPE OF METHOD USED AND AREA OF RESIDENCE, BOTSWANA, 1984

Characteristic	Total		Urban		Rural	
	All	Modern	All	Modern	All	Modern
Current Age						
15-19 years	19.7	11.4	17.2	12.6	20.8	10.8
20-24 years	33.1	21.6	40.8	33.1	30.4	17.5
25-29 years	34.4	23.4	45.8	37.2	30.3	18.4
30-34 years	33.8	25.0	43.2	33.8	30.5	22.0
35-39 years	26.3	17.4	36.5	29.6	24.2	14.9
40-44 years	14.5	8.8	32.9	28.2	11.2	5.2
45-49 years	11.9	7.5	21.4	19.0	10.6	5.9
Number of Living Children						
None	8.6	7.4	9.9	9.5	7.8	6.2
1-2 children	31.5	20.3	43.8	35.9	27.3	15.1
3-5 children	32.6	23.4	44.1	34.3	29.2	20.1
6 children or more	25.5	14.4	43.0	32.5	23.1	12.0
Educational Status (Respondent)						
No School	20.0	8.4	25.8	19.1	19.0	6.7
Less than completed primary	23.1	15.8	38.2	29.1	19.3	12.5
Completed primary	34.7	25.9	33.8	27.6	35.1	25.1
Some secondary and above	45.6	36.6	47.7	40.8	43.9	33.3
Literacy Status						
Literate	32.6	24.4	39.7	32.6	29.6	21.0
Illiterate	19.6	8.4	26.7	18.8	18.5	6.8
Work Status						
Working	37.4	30.6	44.2	38.6	33.2	25.7
Not working	23.5	13.2	30.0	21.2	22.2	11.5
Religion						
Spiritual/African	28.5	19.3	35.3	27.1	26.0	16.4
Protestant	35.8	26.0	38.7	32.3	34.6	23.5
Catholic	34.4	26.4	51.2	41.9	28.6	21.0
Other	23.2	15.9	27.8	23.6	21.9	13.7
None	20.2	10.5	34.0	27.5	17.7	7.4
Educational Status (Partner)*						
No school	19.8	11.6	28.7	22.1	18.4	10.0
Less than completed primary	25.6	16.8	33.5	26.8	23.4	14.1
Completed primary	30.4	20.3	38.2	28.2	27.5	17.4
Some secondary and above	42.2	33.1	44.6	38.2	40.3	29.2
Not sure/Not stated	30.9	18.3	32.9	26.2	30.2	15.5

* Refers only to currently in union women.

TABLE 8.4

PERCENT DISTRIBUTION OF CURRENT USERS BY THE METHOD CURRENTLY USED AND AGE, BOTSWANA, 1984

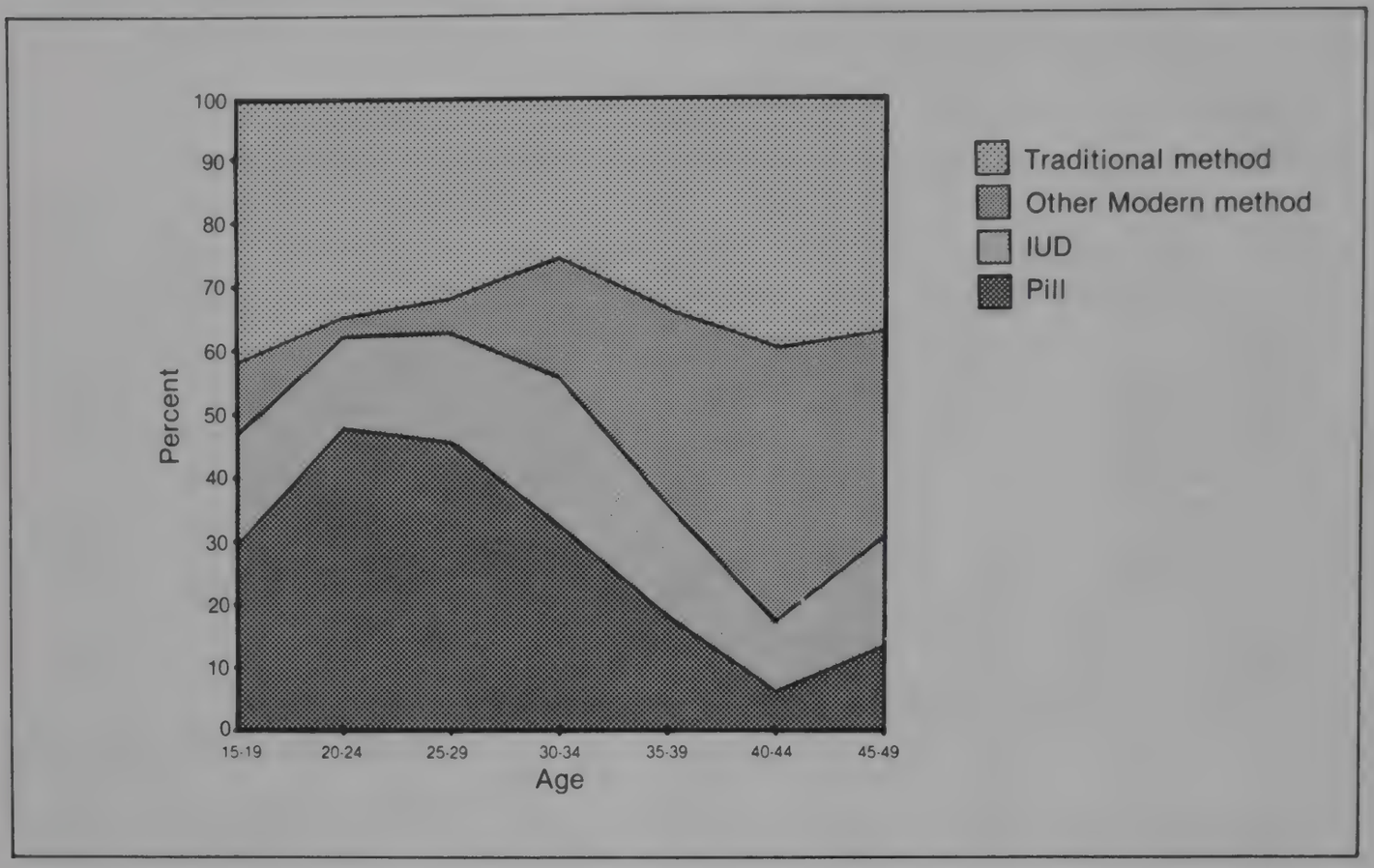
Age	Total	Pill	IUD	Other Modern	Traditional
Total Number	676	243	117	91	225
Total Percent	100.0	35.9	17.4	13.5	33.3
15-19 years	100.0	29.2	17.7	11.1	42.0
20-24 years	100.0	47.6	14.5	3.0	34.9
25-29 years	100.0	45.2	17.4	5.4	32.0
30-34 years	100.0	32.4	23.1	18.7	25.8
35-39 years	100.0	18.2	17.4	30.5	33.9
40-44 years	100.0	6.2	11.2	42.9	39.7
45-49 years	100.0*	13.6	17.3	32.1	37.0

* Fewer than 25 users.

Not only does the prevalence of use vary with age, but the method mix among current users also is related to age. Although the patterns are not uniform, Table 8.4 shows that the proportion of users relying on the pill is substantially greater among women in the 15-34 age cohorts than among older women. There is no uniform pattern in the variation in the percent of current users relying on the IUD by age. However, use of other modern methods (injection, condom and female sterilization) generally increases with age, with users over age 35 being considerably more likely than younger women to be using modern methods other than the pill and IUD. As Figure 8.2 shows, the percentage of users practicing abstinence declines from a peak among users age 15-19 to a low among users age 30-34 before increasing again among older users.

With regard to other socio-demographic differentials in prevalence, Table 8.3 indicates that contraceptive use is lowest among currently in union women who have no living children and among those with six or more

Figure 8.2
PERCENT DISTRIBUTION OF CURRENT USERS BY AGE AND METHOD USED, BOTSWANA, 1984



children. This pattern is observed with respect both to the use of all methods and the use of modern methods. The patterns for urban and rural areas are, however, somewhat different. Among urban women, the percentage using increases sharply from 10 percent among women with no children to 44 percent among women with 1-2 children but then varies only minimally among women with 3 to 5 children and among women with 6 or more children. In contrast, among rural women, the percentage using ranges from only 8 percent among women with no children to 29 percent among women with 3 to 5 children before decreasing to 23 percent among women with 6 or more children.

The results in Table 8.3 also show that family planning use is related to a woman's educational level and literacy status. For example,

currently in union women who have had at least some secondary education are more than twice as likely as those who never attended school to be using family planning. The differentials in the prevalence of use of modern contraceptive methods across educational status groups are even more notable; women with at least some secondary education are four times as likely to be using a modern method than women with no schooling. Similar patterns are observed for urban and rural women.

Table 8.3 indicates that working women are much more likely than women who are not working to be using family planning. For example, the percentage using any method among women who are working is 37 percent compared to 24 percent among women who are not employed. Similar patterns are observed for urban and rural women.

With regard to religion, Table 8.3 shows that, overall, Protestant and Catholic women are somewhat more likely to be using family planning than women belonging to Spiritual/African churches or other religions. Moreover, although for the population as a whole there is only a small differential in the percentage using contraceptives between Protestant and Catholic women (36 percent vs. 34 percent, respectively), the patterns differ markedly among urban and rural women. Urban Catholic women exhibit the highest level of family planning use of any of the subgroups for which prevalence rates are presented in Table 8.3; 51 percent of urban Catholic women are practicing family planning compared to 39 percent of urban Protestant women. Among women in rural areas, however, the opposite is true; 35 percent of rural Protestant women are using family planning compared to only 29 percent of rural Catholic women.

The educational level of a woman's partner is also positively associated with the level of family planning use. Overall, the proportion using varies from only 20 percent among women whose partners never attended school to 42 percent among those whose partners have attended secondary school. Again, similar patterns are observed for urban and rural women.

8.2 DURATION OF CURRENT USE

Table 8.5 shows that most current users have not been contracepting for a long period; 64 percent of all current users have used contraception for less than a year and about 40 percent have used for 6 months or less. Among urban users, the proportion relying on their method for less than a year is 60 percent compared to 66 percent among rural users. Overall, the mean length of time that the average current user has been relying on her method is 13 months (Table 8.6). The mean length of use among urban users is 15 months compared to 12 months among rural users.

Users of modern methods are likely to have been using their method for a much longer period than traditional method users (Figure 8.3). Among the latter group, the mean duration of use is only 9 months compared to 15 months among users relying on modern methods. The differential in the mean duration of use between users of modern and traditional methods, although still notable, is smaller among rural users than among urban users.

TABLE 8.5

PERCENT DISTRIBUTION OF CURRENT USERS BY DURATION OF USE AND AREA OF RESIDENCE, BOTSWANA, 1984

Duration of Use	Total	Urban	Rural
Total Number	676	214	463
Total Percent	100.0	100.0	100.0
0-6 months	39.7	37.4	40.6
7-12 months	24.6	23.0	25.4
13-18 months	7.6	7.0	7.9
19-24 months	8.9	9.6	8.6
25-36 months	5.2	7.7	4.1
37 months or more	8.8	13.8	6.5
Not sure/Not stated	5.2	1.5	6.9

TABLE 8.6

MEAN DURATION OF USE (IN MONTHS) AMONG CURRENTLY IN UNION WOMEN CURRENTLY USING A FAMILY PLANNING METHOD* BY THE METHOD USED AND AREA OF RESIDENCE, BOTSWANA, 1984

Method	Total	Urban	Rural
All Methods	13.0	15.2	12.0
Modern Methods	15.3	16.8	14.3
Pill	15.5	16.1	15.1
IUD	16.1	22.0	12.8
Traditional Methods	8.6	8.5	8.6
Abstinence	8.3	7.9	8.4

* Excludes current users for whom information on the duration of use is not available.

Figure 8.3

COMPARISON OF THE MEAN NUMBER OF MONTHS OF USE REPORTED FOR CURRENT USERS BY THE TYPE OF METHOD USED AND AREA OF RESIDENCE, BOTSWANA, 1984

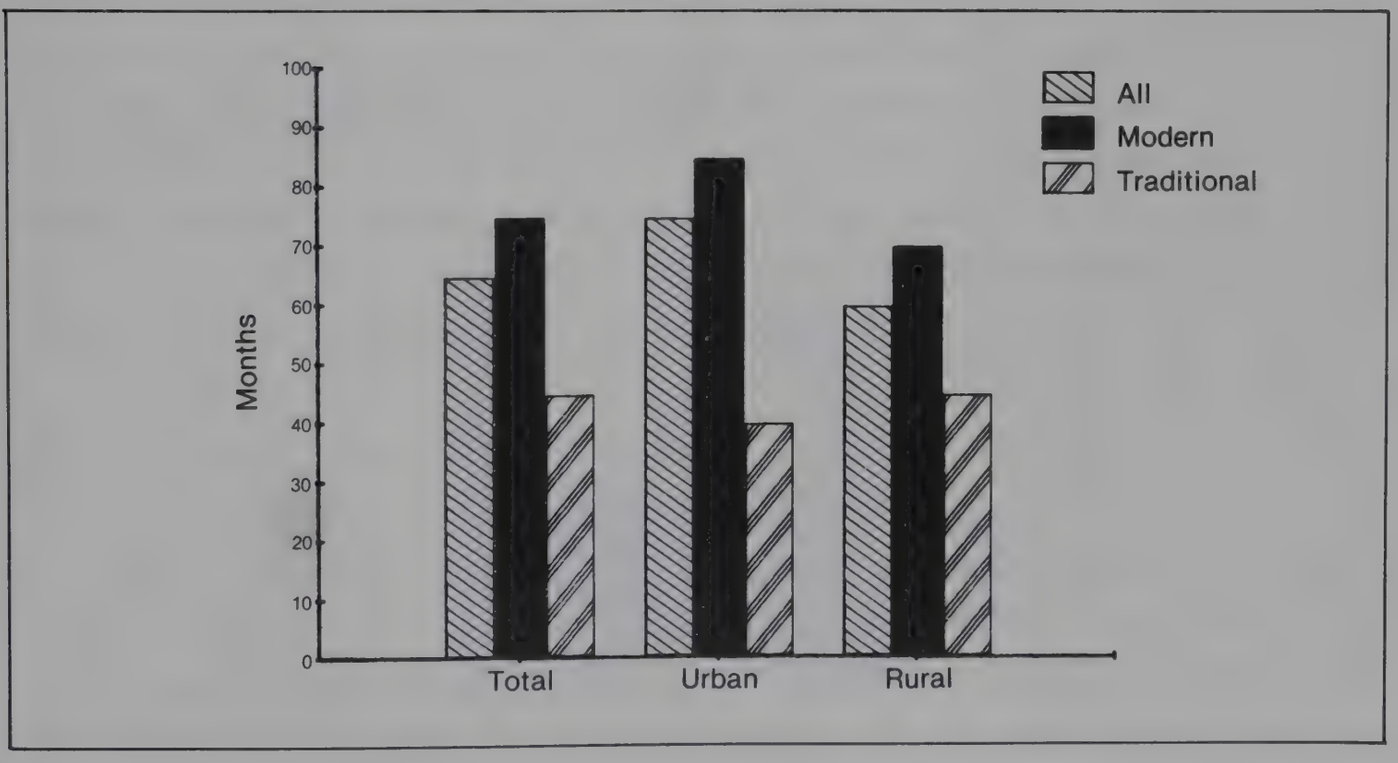


Table 8.6 also shows that the average duration of use among current users of modern methods varies according to the specific method used and the area of residence of the user. For example, while the average duration of use among pill users is only 0.6 months longer than that for the IUD, the duration of use reported by rural pill users is nearly three months longer than the duration of use reported by rural IUD users. The pattern among urban users is the reverse with urban IUD users being more likely to have used for a somewhat longer duration than urban pill users.

8.3 INDICATORS OF USER SATISFACTION

8.3.1 Method Preferences Among Current Users

One out of every five current users of family planning in Botswana wants to change their method (Figure 8.4). Two-thirds of those wanting

Figure 8.4
INDICATORS OF METHOD DISSATISFACTION AMONG CURRENT USERS, BOTSWANA, 1984

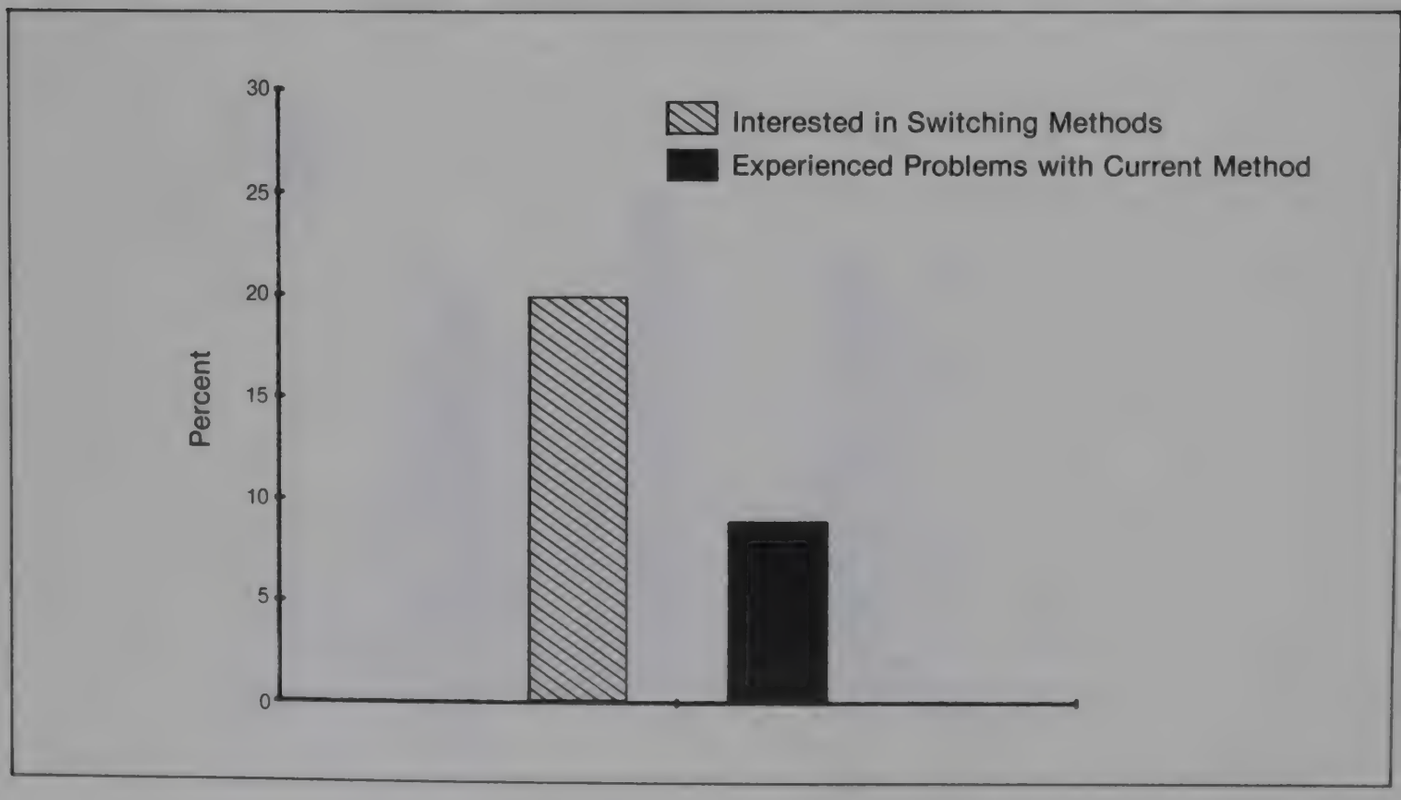


TABLE 8.7

PERCENT DISTRIBUTION OF CURRENT USERS PREFERRING ANOTHER METHOD BY METHOD CURRENTLY USED AND PREFERRED METHOD, BOTSWANA, 1984

Preferred Method	All Methods	Modern Methods	Traditional Methods
Total Number	136	46	90
Total Percent	100.0	100.0	100.0
Pill	46.9	26.6	57.3
Injection	13.1	9.4	15.0
IUD	22.9	40.9	13.7
Female sterilization	10.7	16.7	7.6
Other modern	3.0	5.4	1.8
Other traditional	1.5	0.0	2.3
Not sure	1.8	1.0	2.3

to switch methods are using a traditional method. Table 8.7 shows that the main methods preferred by current users interested in changing methods in order of preference are the pill, IUD, injection and female sterilization. It is notable that none of the current users of modern methods who wants to change preferred a traditional method. The IUD is the most frequently preferred method among modern method users interested in switching followed by the pill, female sterilization and injection. Among traditional method users thinking about changing their method, the pill is the most popular method followed in order of decreasing preference by injection, the IUD and female sterilization.

8.3.2 Reason Not Using Preferred Method

Table 8.8 shows the reasons that current users interested in changing their method give for not using their preferred method. The most frequently mentioned reason is that the user is still breastfeeding (25 percent). Seven percent say their husbands disapprove of the method that they

TABLE 8.8

PERCENT DISTRIBUTION OF CURRENT USERS WHO PREFER A METHOD OTHER THAN THEIR PRESENT METHOD BY THE REASON THAT THEY ARE NOT USING THE PREFERRED METHOD, BOTSWANA, 1984

Reason Not Using Preferred Method	
Total Number	136
Total Percent	100.0
Husband disapproves of method	7.7
Fears side effects	3.4
Health problems prevent use	2.8
Lack information about method or source	4.5
Not yet achieved desired family size	4.5
Still breastfeeding	24.6
Other reasons	40.5
Not stated	11.6

prefer. Other reasons for using a method other than the one preferred include lack of information about the method or a source (4 percent), not having had as yet the desired number of children (4 percent), fear of side effects (3 percent) and health problems which prevent use of the method (3 percent).

8.3.3 Problems With Method Used

Table 8.9 shows the percentage of current users who report that they have had problems using their method. Overall, about one out of every ten users says that she has had problems using her method (Figure 8.4). By method, the percentage of current users experiencing problems ranges from 11 percent among the small number of condom users to 19 percent among injection users. The percentages among users of the two most popular methods, the pill and IUD, are 12 percent and 17 percent, respectively.

TABLE 8.9

PERCENT OF CURRENT USERS EXPERIENCING PROBLEMS WITH THEIR METHOD BY THE METHOD USED, BOTSWANA, 1984

Current Method	
All users	9.1
Pill	12.3
Condom	10.5
Injection	19.1
IUD	16.8
Female sterilization	11.5
Abstinence/Other methods	0.0

The problems which users report generally relate to side effects that they experienced while using their method; 59 percent of the 62 users who had some problem complained that their method had disrupted their menstrual cycle (15 percent) or caused other side effects including dizziness or bleeding (44 percent). About one out of five users who reported having a problem said that their methods (i.e., the pill and injection) were not always readily available while around one in ten users with a problem indicated that they sometimes forgot to use their method (i.e., the pill). An additional ten percent mentioned other problems.

8.4 CONTRACEPTIVE CONTINUATION

8.4.1 Duration of Use

As discussed earlier in this chapter, current users were asked about the length of time that they had been using their method during the current (uninterrupted) segment of use (see Tables 8.5 and 8.6). Ever

users of the pill, injection, IUD and abstinence who were not using at the time of the survey also were asked about the length of time that they used the method during the most recent segment of use. Using these data and life table techniques, it is possible to estimate, for each of these methods, the probability that a user will be using the method at any given point in time after the method is accepted.

Before discussing these findings, several observations must be made with respect to the data on which the analysis is based. First of all, the analysis is limited to women reporting the current or most recent period of use to be five years or less. The analysis is also affected by the fact that there is considerable heaping of responses from users of a method with respect to the duration of the current or most recent segment of use. For example, 43 percent of pill users reported that they had used the method for 6, 12, 24 or 36 months.

Table 8.10 shows the pattern of contraceptive continuation among currently in union women reporting ever use of the pill, injection, the IUD or abstinence. The table suggests that IUD users are more likely to use for a considerably longer duration than pill users. In turn, users of both these methods are considerably more likely to be using at any point in time after they adopt a method than abstinence and injection users.

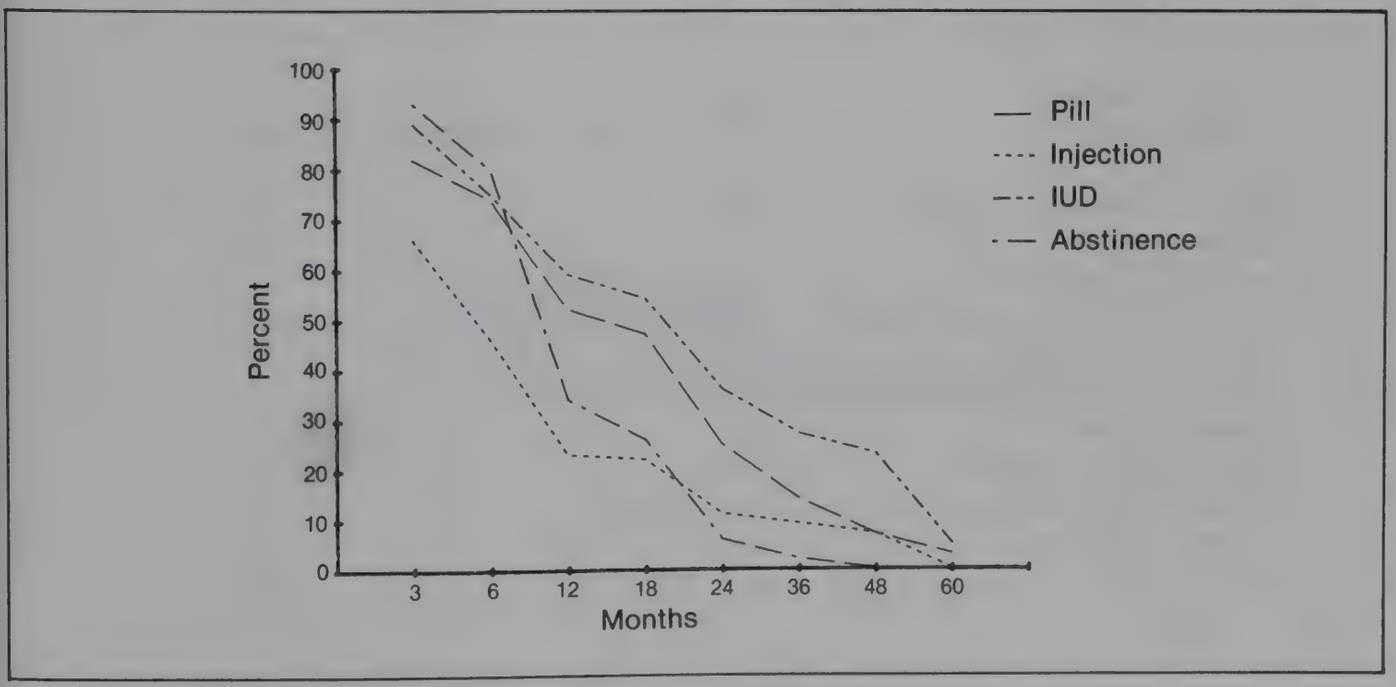
The results presented in Figure 8.5 show that, in the case of abstinence and injection, the most rapid dropout of users occurs in the first year of use. Seventy-seven percent of injection users and 66 percent of abstinence users stop using the method during the first year of use compared to 48 percent of pill users and 41 percent of IUD users. By the end of two years, the proportion of users who are still contracepting is only 6 percent in the case of abstinence, 11 percent in the case of injection, 25 percent in the case of pill and 36 percent in the case of the IUD. The median duration of use varies from less than 7 months in the case of injection users to about two years in the case of IUD users.

TABLE 8.10

MEDIAN DURATION OF USE (IN MONTHS) AND PROPORTION USING AT LEAST 3, 6, 12, 18, 24, 36, 48 AND 60 MONTHS DERIVED BY LIFE TABLE TECHNIQUES FOR CURRENTLY IN UNION WOMEN EVER USING THE PILL, INJECTION, THE IUD AND ABSTINENCE, BOTSWANA, 1984

	Pill	Injection	IUD	Abstinence
Total Number	726	122	237	641
Median duration	16.2	6.7	24.2	12.4
Proportion still using at the end of:				
3 months	.82	.66	.89	.93
6 months	.74	.46	.75	.80
12 months	.52	.23	.59	.34
18 months	.47	.22	.54	.26
24 months	.25	.11	.36	.06
36 months	.14	.09	.27	.02
48 months	.07	.07	.23	.00
60 months	.03	.00	.05	.00

Figure 8.5
CONTINUATION OF FAMILY PLANNING USE BY METHOD, BOTSWANA, 1984



8.4.2 Reasons for Discontinuation

Past users of the pill, injection, the IUD and abstinence were asked about why they stopped using during the most recent segment of use. Their responses which are presented in Table 8.11 provide valuable insights into the factors which contribute to a decision to stop using a method.

Experience with or concern about side effects are among the major reasons for discontinuation among users of modern methods in Botswana. The percentage reporting that they stopped using because their menstrual cycle had been disrupted, they had experienced other side effects or they were worried about side effects is 38 percent in the case of former pill users, 40 percent in the case of former injection users and 53 percent in the case of former IUD users.

TABLE 8.11

REASON FOR DISCONTINUING USE DURING LAST SEGMENT OF USE AMONG PAST USERS OF THE PILL, INJECTION, THE IUD AND ABSTINENCE, BOTSWANA, 1984

Reason for Discontinuing	Pill	Injection	IUD	Abstinence
Total Number	524	100	119	475
Total Percent	100.0	100.0	100.0	100.0
Wanted to become pregnant	29.2	12.7	17.1	15.3
Became pregnant	2.5	4.1	0.0	0.3
Menstrual disruption	5.5	22.5	13.9	0.0
Other side effects experienced	18.6	9.8	11.2	0.0
Side effects feared	14.4	8.0	27.9	0.4
Problems obtaining/using method	5.3	7.0	2.7	0.8
Changed method	1.8	5.0	1.7	29.2
Partner/other disapproves	4.8	8.2	0.4	7.0
Health problems prohibited use	5.3	9.5	6.5	0.4
No longer exposed	2.9	0.0	1.3	1.5
Other reasons	7.8	8.4	11.4	39.7
Not stated	1.9	4.8	5.9	5.4

Figure 8.6

PERCENT DISTRIBUTION OF WOMEN EVER USING A METHOD BY REASON FOR DISCONTINUING USE OF A METHOD DURING THE MOST RECENT SEGMENT OF USE BY METHOD, BOTSWANA, 1984

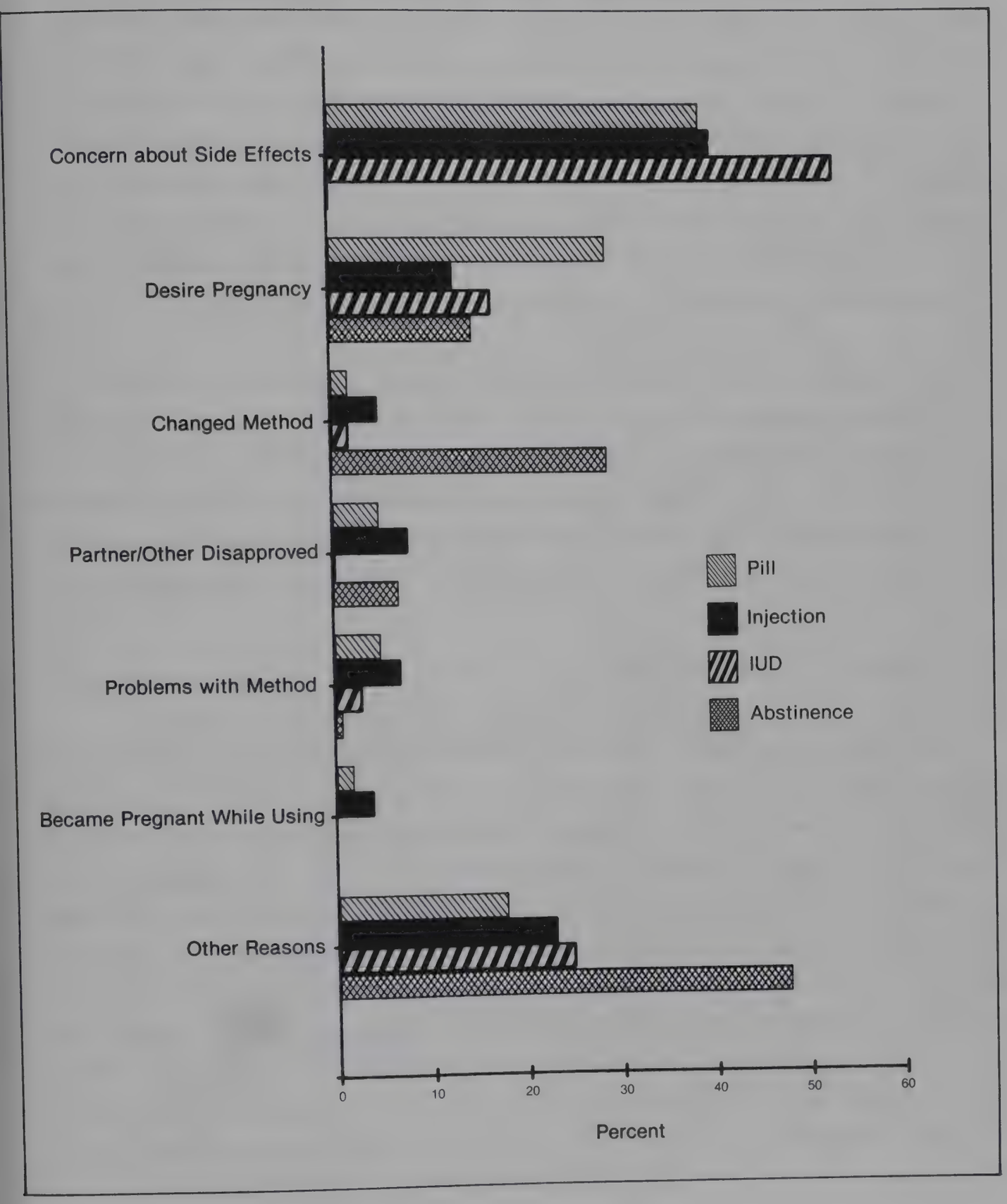


Figure 8.6 shows that, after side effects, the desire to have another child is the most important reason for discontinuing use of a modern method, especially in the case of the pill. The percentages of past users saying that they stopped using so that they would become pregnant ranged from 13 percent in the case of injection to 29 percent in the case of the pill. Other reasons mentioned by at least five percent of past users of modern methods as reasons for discontinuing included husband's disapproval, health problems and difficulties in obtaining or using the method. Only a small proportion of former pill and injection users became pregnant while they were using the method in question indicating that method failure is not a significant problem among users.

With regard to abstinence, the major reasons for discontinuing use include the decision to change methods (29 percent) and the desire to become pregnant (15 percent). Husband's dissatisfaction was a factor in only 7 percent of the cases. Among abstinence users citing other reasons for discontinuing (39 percent), the fact that the youngest child had been weaned was a principal reason for ceasing the practice of abstinence.

8.4.3 Injection Users and Side Effects

Side effects are among the major reasons for discontinuation among injection users. To obtain information on this problem, women who had ever used injection were asked a number of additional questions relating to the issue of side effects including whether they had been informed about the possibility of side effects when they obtained their method, whether they had experienced any side effects and what they had done if they had had side effects. Their responses are summarized in Tables 8.12 through 8.14. The results indicate that health workers had discussed the possibility of side effects with about two-thirds of all ever users of injection (Table 8.12). Urban ever users were slightly more likely than rural ever users to report that they had been informed about the possible side effects of injection.

Table 8.12

PERCENT OF EVER USERS OF INJECTION WHO DISCUSSED POSSIBILITY OF SIDE EFFECTS WITH HEALTH WORKER AND PERCENT OF ALL EVER USERS OF INJECTION WHO EXPERIENCED SIDE EFFECTS BY AREA OF RESIDENCE, BOTSWANA, 1984

	Total	Urban	Rural
Total number	146	54	92
Discussed possibility of side effects with health worker	62.9	70.3	58.6
Experienced side effects	53.7	54.2	53.4

The results also suggest that about one out of every two women ever using injection had experienced side effects (Table 8.12). Table 8.13 shows that the most frequently mentioned side effect was disruption of the menstrual cycle (41 percent) followed by dizziness (9 percent).

Table 8.13

PERCENT DISTRIBUTION OF EVER USERS OF INJECTION EXPERIENCING SIDE EFFECTS BY TYPE OF SIDE EFFECT AND AREA OF RESIDENCE, BOTSWANA, 1984

Side Effect	Total	Urban	Rural
Total Number	78	29	49
Total Percent	100.0	100.0	100.0
Disrupted Menstrual Cycle	41.2	45.3	38.7
Bleeding	6.7	1.6	9.7
Dizziness	9.6	9.4	9.7
Other side effects	39.4	40.6	38.8
Not Sure	3.2	3.1	3.2

Table 8.14

PERCENT DISTRIBUTION OF EVER USERS OF INJECTION WHO EXPERIENCED SIDE EFFECTS BY ACTION TAKEN AND AREA OF RESIDENCE, BOTSWANA, 1984

Action Taken	Total	Urban	Rural
Total Number	78	29	49
Total Percent	100.0	100.0	100.0
Sought medical advice	43.2	45.3	41.9
Visited traditional healer	0.6	1.6	0.0
Stopped using injection	48.1	42.2	51.6
Did nothing	8.1	10.9	6.5

Among ever users who reported having had side effects, about one out of every two users discontinued using injection, 43 percent sought medical advice and 8 percent did nothing about the side effects (Table 8.14). Rural users were more likely to stop using the method than urban women.

These results suggest that communication between family planning service providers and acceptors is not entirely satisfactory. Women who experience side effects should be encouraged to consult their service providers about adopting another method while those who are afraid of potential side effects should be better informed about the method that they adopt. The answers to these problems are to: (1) establish a follow-up program for users and (2) to establish and implement an effective information education and communication program with input from the MCH/FP and Health Education units of the Family Health Division.

8.5 NONUSERS

8.5.1 Reason for Nonuse

Lack of information about family planning and lack of immediate

TABLE 8.15

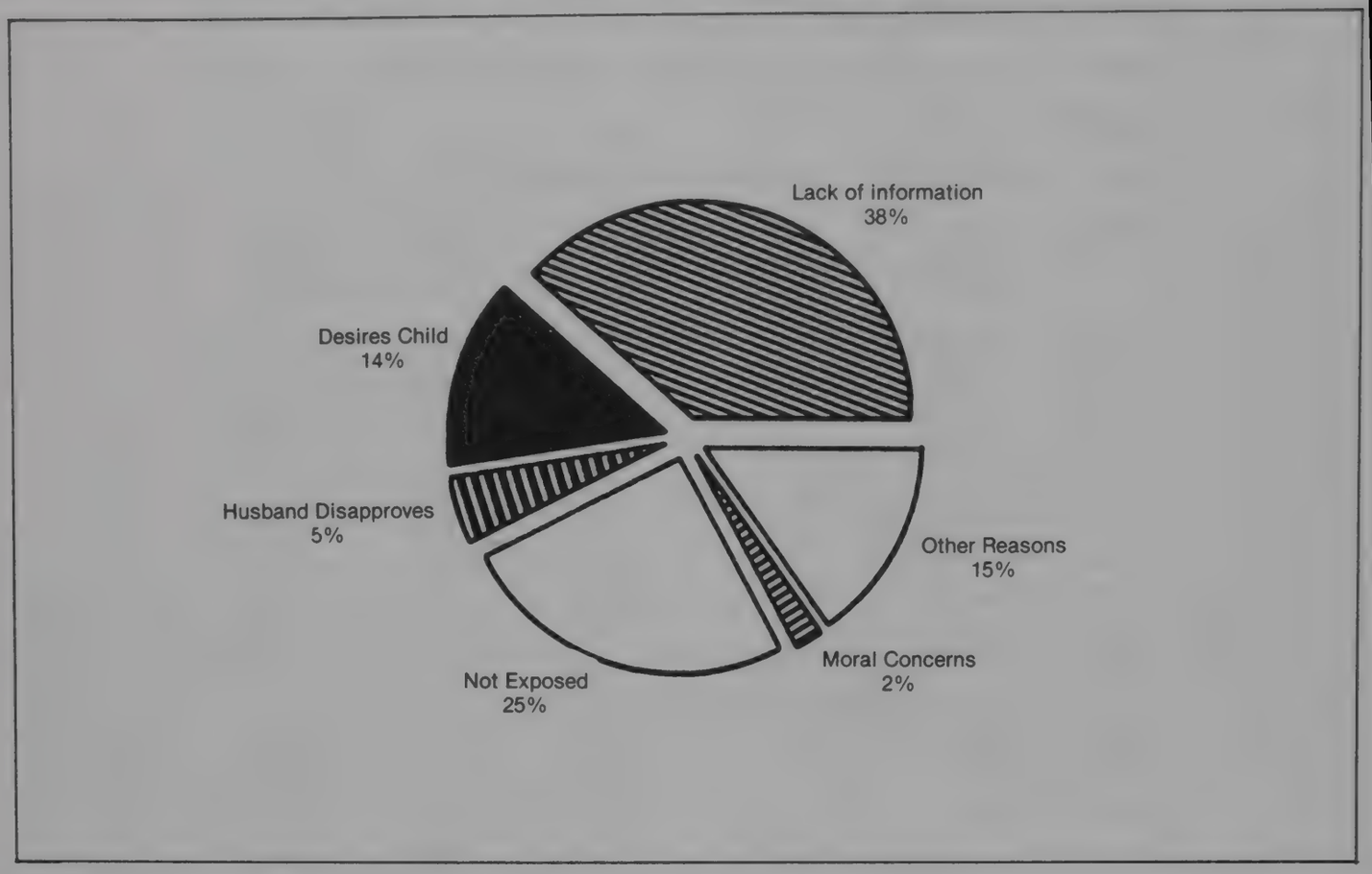
PERCENT DISTRIBUTION OF CURRENTLY IN UNION WOMEN NOT CURRENTLY USING FAMILY PLANNING BY REASON FOR NONUSE AND AREA OF RESIDENCE, BOTSWANA, 1984

Reasons for Nonuse	Total	Urban	Rural
Total Number	1,757	362	1,395
Total Percent	100.0	100.0	100.0
Does not know method	26.8	19.4	28.7
Does not know how to use methods	2.3	2.1	2.3
Considers methods not effective	0.4	0.1	0.5
Fears general health problems	6.3	8.5	5.7
Fears specific method side effects	1.7	2.0	1.6
Health problems prevent use	1.4	1.8	1.3
Clinic refused method	0.3	0.4	0.2
Desires child	13.6	16.6	12.9
Not interested in using	8.4	13.7	7.1
Religious/Moral reasons	2.3	1.6	2.5
Husband/Others disapprove	4.6	4.4	4.7
Breastfeeding	5.9	3.8	6.5
Not exposed[a]	19.2	20.3	19.1
Other reasons	5.4	4.6	5.6
Not stated	1.1	0.8	1.1

[a] includes women who report they are pregnant, menopausal, amenorrheic or whose partner is away.

exposure are among the major reasons for nonuse among currently in union women age 15-49 not currently using family planning (Table 8.15 and Figure 8.7). About four out of every ten nonusers are not using for reasons related to lack of information on family planning. The majority of these women---27 percent of all nonusers---do not know a family planning method. As noted in the previous chapter, lack of knowledge is more common in the rural areas than in the urban areas; 28 percent of rural nonusers do not know a method compared to 19 percent of urban nonusers. About 12 percent of nonusers cite other reasons relating to lack of information about family planning. These factors include a lack

Figure 8.7
PERCENT DISTRIBUTION OF NONUSERS BY THE PRINCIPAL REASON FOR NONUSE, BOTSWANA, 1984



of knowledge about how to use methods, a fear of health problems or side effects associated with use, a belief that health problems prohibit use or an attitude that methods are not effective. The comparatively large proportion of nonusers who either do not know any methods or are not well informed about family planning indicates a need for intensification of MCH/FP information, education and communication.

Lack of exposure to the risk of pregnancy is cited by 25 percent of all nonusers as the main reason for nonuse. Those considering themselves as not exposed to pregnancy include women who are breastfeeding (6 percent) or who report that they are pregnant (13 percent), or meno-

pausal, amenorrheic or their partners are away (6 percent). Other reasons for nonuse include a desire for more children (14 percent), lack of interest in using (9 percent) and religious or moral concerns (2 percent).

Disapproval by partners or other relatives is cited by only 5 percent of all nonusers as the main reason for not using family planning. Table 8.16 shows, however, that there are major differences between users and nonusers with regard to the opinion they believe their partners have about the use of family planning. Current users are much more likely than nonusers to believe that their partners approve of family planning; only 37 percent of all nonusers knowing at least one family planning method think that their partners would approve of family planning compared to 68 percent of all current users. In turn, the percentage who think that their partners disapprove of family planning is much greater among nonusers (31 percent) than users (19 percent).

TABLE 8.16

PERCENT DISTRIBUTION OF CURRENTLY IN UNION WOMEN KNOWING AT LEAST ONE FAMILY PLANNING METHOD BY USER STATUS AND OPINION AS TO PARTNER'S ATTITUDE ABOUT FAMILY PLANNING USE, BOTSWANA, 1984

Partner's Attitude Toward Family Planning	Users	Nonusers
Total Number	677	1,286
Total Percent	100.0	100.0
Approves	67.8	37.1
Disapproves	18.7	31.2
Says it depends	1.0	3.3
Has no opinion	1.6	7.7
Not sure	10.9	20.6

8.5.2 Interest in Obtaining Family Planning Information

As shown in Table 8.17, there is great interest among currently in uni women knowing at least one contraceptive method and not currently using family planning in obtaining information on family planning; 90 percent of these women indicate that they would like to have more family planning information. There is only slightly more interest in obtaining additional information in the urban areas than in the rural areas; 94 percent and 89 percent of women, respectively, wanted more information about family planning.

TABLE 8.17

PERCENT DISTRIBUTION OF CURRENTLY IN UNION WOMEN KNOWING AT LEAST ONE FAMILY PLANNING METHOD AND NOT CURRENTLY USING BY INTEREST IN OBTAINING INFORMATION ON FAMILY PLANNING AND AREA OF RESIDENCE, BOTSWANA, 1984

Interest in Obtaining FP Information	Total	Urban	Rural
Total Number	1,286	292	994
Total Percent	100.0	100.0	100.0
Interested	90.5	93.4	89.6
Not interested	7.7	5.8	8.3
Not stated	1.8	0.8	2.1

8.5.3 Interest in Using in the Future

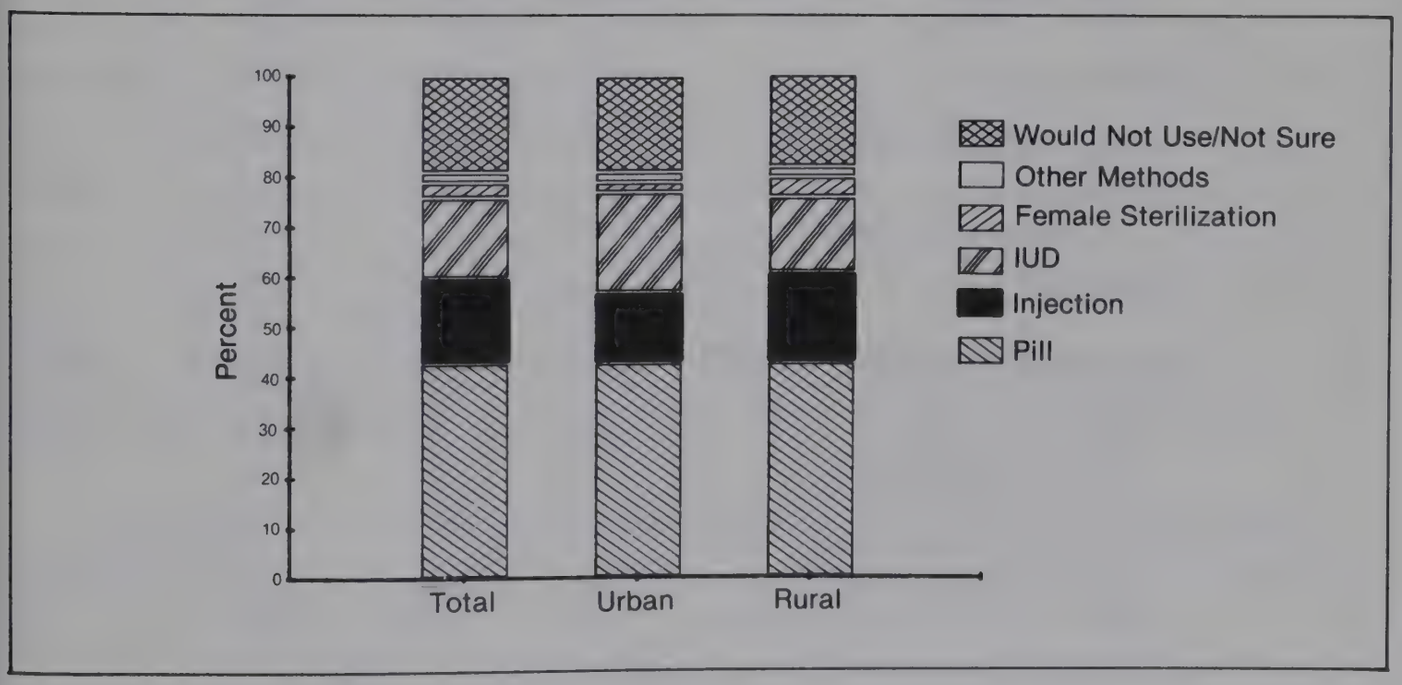
Among currently in union nonusers knowing at least a family planning method, 82 percent would consider using a method in the future (Table 8.18) The pill is clearly the preferred method among nonusers considering future use followed by injection and the IUD (Figure 8.8). These patterns do not differ substantially among urban and rural nonusers although rural nonusers are somewhat more likely than urban nonusers to prefer injection to the IUD

TABLE 8.18

PERCENT DISTRIBUTION OF CURRENTLY IN UNION WOMEN KNOWING AT LEAST ONE FAMILY PLANNING METHOD AND NOT CURRENTLY USING BY METHOD PREFERENCE AND AREA OF RESIDENCE, BOTSWANA, 1984.

Method Preference	Total	Urban	Rural
Total Number	1,286	292	994
Total Percent	100.0	100.0	100.0
Would consider using	81.8	81.5	81.4
Pill	42.7	42.8	42.6
Injection	16.9	14.0	17.8
IUD	16.1	20.1	14.9
Female sterilization	3.3	2.0	3.7
Other modern methods	1.4	1.3	1.4
Traditional methods	1.0	1.2	1.0
Would not use	9.6	7.9	10.1
Not sure/Not stated	8.9	10.6	8.5

Figure 8.8
PERCENT DISTRIBUTION OF NONUSERS BY THE METHOD THE NONUSER WOULD CONSIDER ADOPTING IN THE FUTURE AND AREA OF RESIDENCE, BOTSWANA, 1984



8.6 UNMET NEED FOR FAMILY PLANNING

Currently in union women exposed to the risk pregnancy and not using family planning methods have been considered as in need of contraceptive services if: (1) they do not want more children (i.e., they would like to limit the size of their families) or (2) they want to have more children b they would like to delay their next pregnancy for at least one year (i.e. they are interested in spacing their births) (Westoff, 1981). Using BFHS data and these definitions, the level of unmet need for family planning among women in Botswana can be estimated.

Looking at the first question of exposure status, Table 8.19 shows that four out of every ten currently in union women in Botswana are not

TABLE 8.19

PERCENT DISTRIBUTION OF CURRENTLY IN UNION WOMEN BY EXPOSURE STATUS, CURRENT USE STATUS AND AREA OF RESIDENCE, BOTSWANA, 1984

Exposure and Current Use Status	Total	Urban	Rural
Total Number	2,433	576	1,857
Total Percent	100.0	100.0	100.0
Exposed	57.6	69.5	54.0
Using family planning	27.8	37.1	25.0
Modern method	18.6	29.8	15.1
Traditional method	9.2	7.3	9.9
Not using	29.8	32.4	29.0
Not currently exposed	42.4	30.5	46.0
Currently pregnant	11.4	9.7	12.0
Not yet resumed sexual relations following birth	14.0	6.9	16.2
Amenorrheic, menopausal, other physical problems	14.6	12.4	15.3
Partner away six months or more	2.3	1.5	2.6

exposed to the risk of pregnancy. Almost one out of every two rural women falls into the not exposed category compared to slightly less than one out of every three urban women. The greater likelihood for urban women to be exposed to the risk of pregnancy compared to rural women is largely due to the considerably lower prevalence of the practice of abstinence among urban women.

Among those women exposed to the risk of pregnancy, approximately one out of every two is not using a family planning method. Overall, almost 30 percent of all currently in union women are exposed to the risk of pregnancy and not using a contraceptive method (Figure 8.9). Although urban women are more likely to fall into the exposed category, Table 8.19 indicates that, because a greater proportion of urban women is using family planning, particularly modern methods, the percentage of women exposed and not using a family planning method is almost identical in urban (32 percent) and rural areas (29 percent).

Table 8.20 takes into account family size desires as well as exposure status in estimating the need for family planning services among women in Botswana. The table shows that one out of every six currently in union women can be considered to be in immediate need of family planning, i.e., she wants to limit or space births and she is exposed to the risk of pregnancy and not using contraception. Women in urban areas are slightly more likely to be in need of family planning services than women in rural areas (18 percent vs. 16 percent, respectively). Among women who are in need of services, 32 percent are potential limiters while the remainder report that they want another child but would like to space the next birth. The proportion of potential limiters among women in need of family planning is greater among rural than urban women (Figure 8.9).

In Chapter 6, it was noted that the health risks associated with pregnancies are especially great among women who are in the following

Figure 8.9
UNMET NEED FOR FAMILY PLANNING AMONG CURRENTLY IN UNION WOMEN, BOTSWANA, 1984

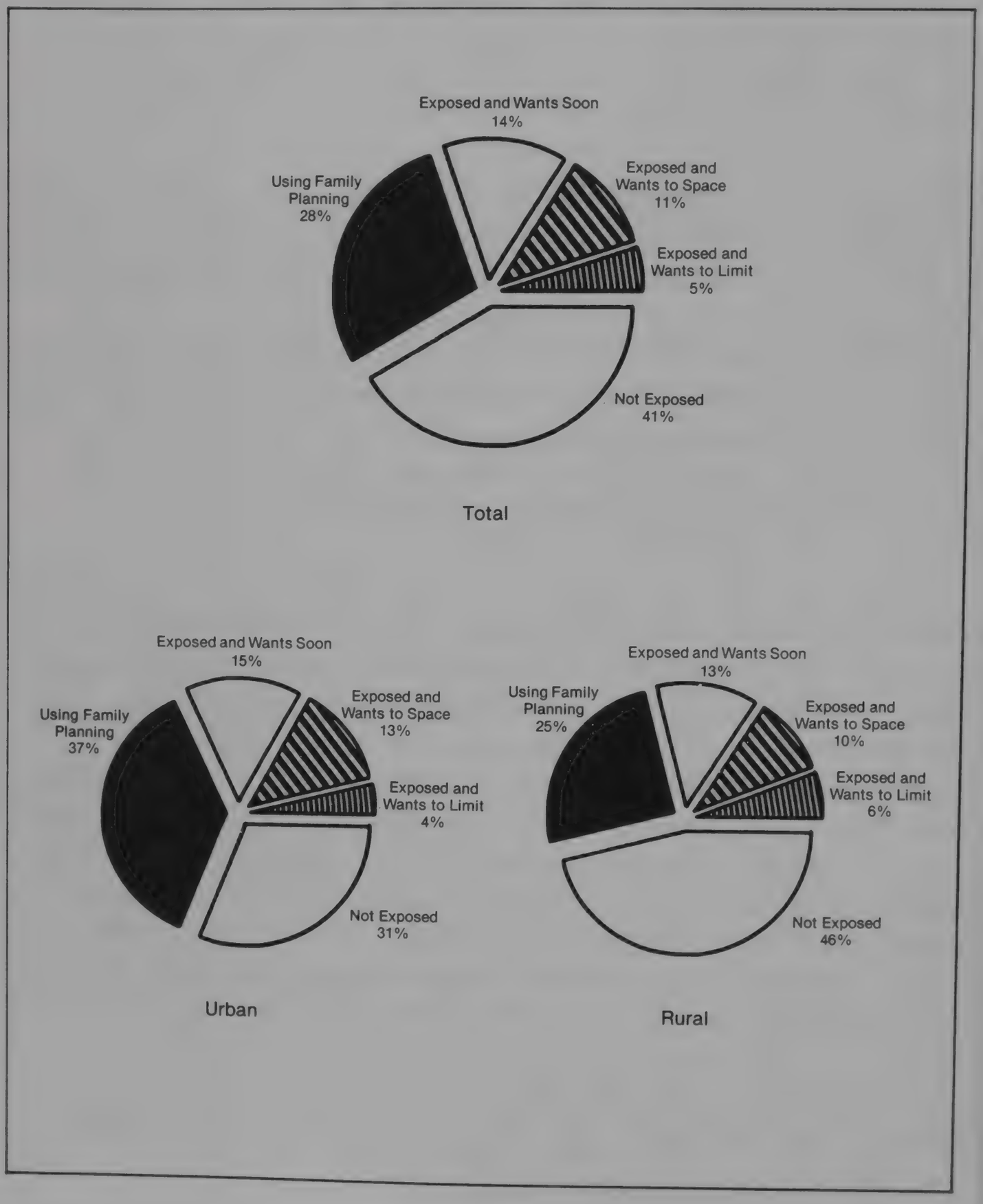


TABLE 8.20

PERCENT DISTRIBUTION OF CURRENTLY IN UNION WOMEN BY NEED FOR FAMILY PLANNING SERVICES AND AREA OF RESIDENCE, BOTSWANA, 1984

Need for Family Planning	Total	Urban	Rural
Total Number	2,433	576	1,857
Total Percent	100.0	100.0	100.0
In need of family planning	16.2	17.1	16.0
Wants to limit	5.2	3.9	5.7
Wants to space	11.0	13.2	10.3
Not in need of family planning	82.8	82.9	84.0
Exposed but wants child immediately	13.6	15.2	13.1
Exposed and using family planning	27.8	37.1	24.9
Modern method	18.6	29.8	15.1
Traditional method	9.2	7.3	9.8
Not exposed	41.4	30.6	46.0

categories: over age 35, under age 18, with four or more births or with a child less than two years old. Table 8.21 shows that 16 percent of the 1,780 women who are in one or more of the four reproductive health risk categories can be considered to be in immediate need of family planning services. These women represent over 70 percent of all currently in union women considered to be in need of family planning. Special efforts should be directed to identifying and providing services to these women for whom the health risks of an unplanned pregnancy are greater---both for the mother and her child---than for other women.

TABLE 8.21

PERCENT DISTRIBUTION OF CURRENTLY IN UNION WOMEN IN ONE OR MORE OF THE FOUR REPRODUCTIVE HEALTH RISK CATEGORIES BY THE NEED FOR FAMILY PLANNING SERVICES AND AREA OF RESIDENCE, BOTSWANA, 1984

Need for Family Planning	Total	Urban	Rural
Total Number	1,780	349	1,431
Total Percent	100.0	100.0	100.0
In need of family planning	15.3	15.6	15.3
Wants to limit	6.5	5.7	6.7
Wants to space	8.8	9.9	8.6
Not in need of family planning	84.7	84.4	84.7
Exposed but wants child immediately	9.5	9.4	9.6
Exposed and using family planning	28.3	40.0	25.5
Modern method	16.5	29.1	13.4
Traditional method	11.8	10.9	12.1
Not exposed	46.9	35.0	49.6

Finally, substantial proportions of currently in union women who are not presently exposed to the risk of pregnancy because they are breastfeeding, amenorrheic or practicing abstinence or because they are currently pregnant may be in need of family planning services as their exposure status changes to meet their goals of spacing or limiting future births. Table 8.22 shows that 70 percent of women in the not exposed category want to limit their family size or delay their next birth. They represent 28 percent of all currently in union women. The percentage of currently in union women in rural areas in this group (30 percent) is almost double that in urban areas (16 percent). It is important that, as

TABLE 8.22

PERCENT DISTRIBUTION OF CURRENTLY IN UNION WOMEN WHO ARE NOT EXPOSED TO THE RISK OF PREGNANCY* BY POTENTIAL NEED FOR FAMILY PLANNING AND AREA OF RESIDENCE, BOTSWANA, 1984

Desire to Limit/Space	Total	Urban	Rural
Total Number	963	160	803
Total Percent	100.0	100.0	100.0
In need of family planning	74.8	65.6	70.1
Wants to limit	45.4	36.2	40.8
Wants to space	29.4	29.4	29.3
Not in need of family planning	25.2	34.4	29.9

*Excludes menopausal women.

these women become exposed to the risk or pregnancy, that they be provided with family planning services if they still desire to limit or space births.

Chapter 9
AVAILABILITY OF FAMILY PLANNING SERVICE

SUMMARY: Almost all women using a modern contraceptive method in Botswana obtained their method from a Ministry of Health facility. Most users walk to their source, and the median travel time to a source is about 20 minutes. Access to contraceptive services is considerably better in urban than in rural areas. The average travel time to a source for rural users (30 minutes) is twice that reported for urban users (15 minutes).

Most users are satisfied with the services that they receive at their source. The major recommendations for improving services are to ensure a continuous supply of methods at facilities and to increase the number of outlets providing services. A significant group of users also indicate that they would prefer to obtain services in the evening.

Most nonusers knowing about family planning also know about a source where they can obtain a family planning method. Access to services is not significantly better for users than nonusers indicating that the availability is not a major factor in nonuse. Moreover, among nonusers who have ever obtained contraceptive supplies or information, most have been satisfied with the services that they were provided.

Data from the BFHS can be used to look at a number of issues relating to the availability of contraceptive services in Botswana. This chapter explores these findings, focusing first upon information obtained from current users with regard to the family planning service providers on which they rely and then upon information obtained from nonusers with respect to the sources from which they indicate that they would obtain family planning services.

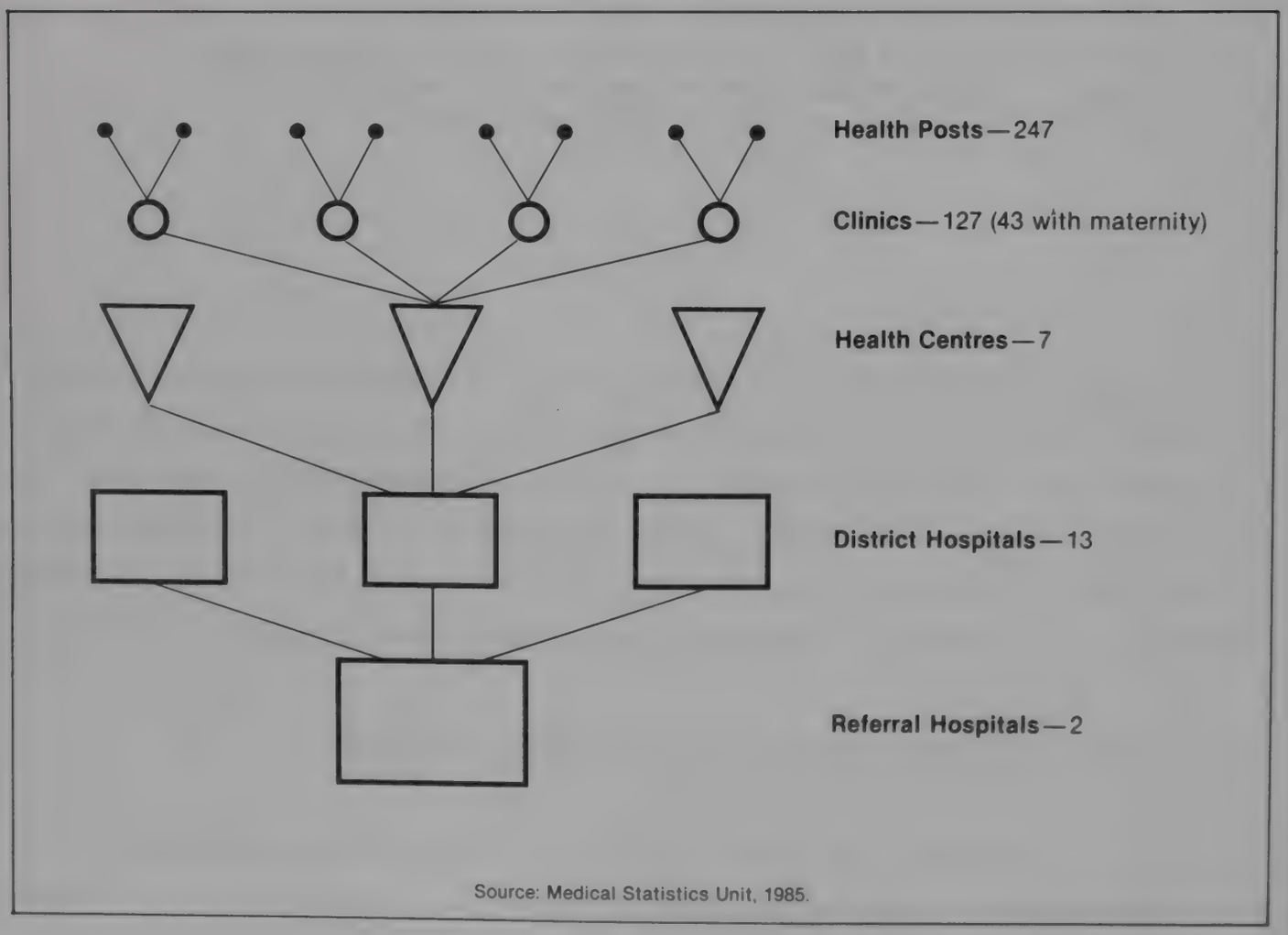
9.1 FAMILY PLANNING SERVICE DELIVERY IN BOTSWANA

Prior to examining the BFHS results, it is helpful to review how the delivery of family planning services is organized in Botswana. The emphasis

in the provision of family planning services is on the spacing of births fo health purposes, and the delivery of contraceptive services is fully integrated into the public sector health care delivery system alongside other curative, preventive and promotive services. The health care deliver system includes the following five basic levels (Figure 9.1 and Figure 9.2)

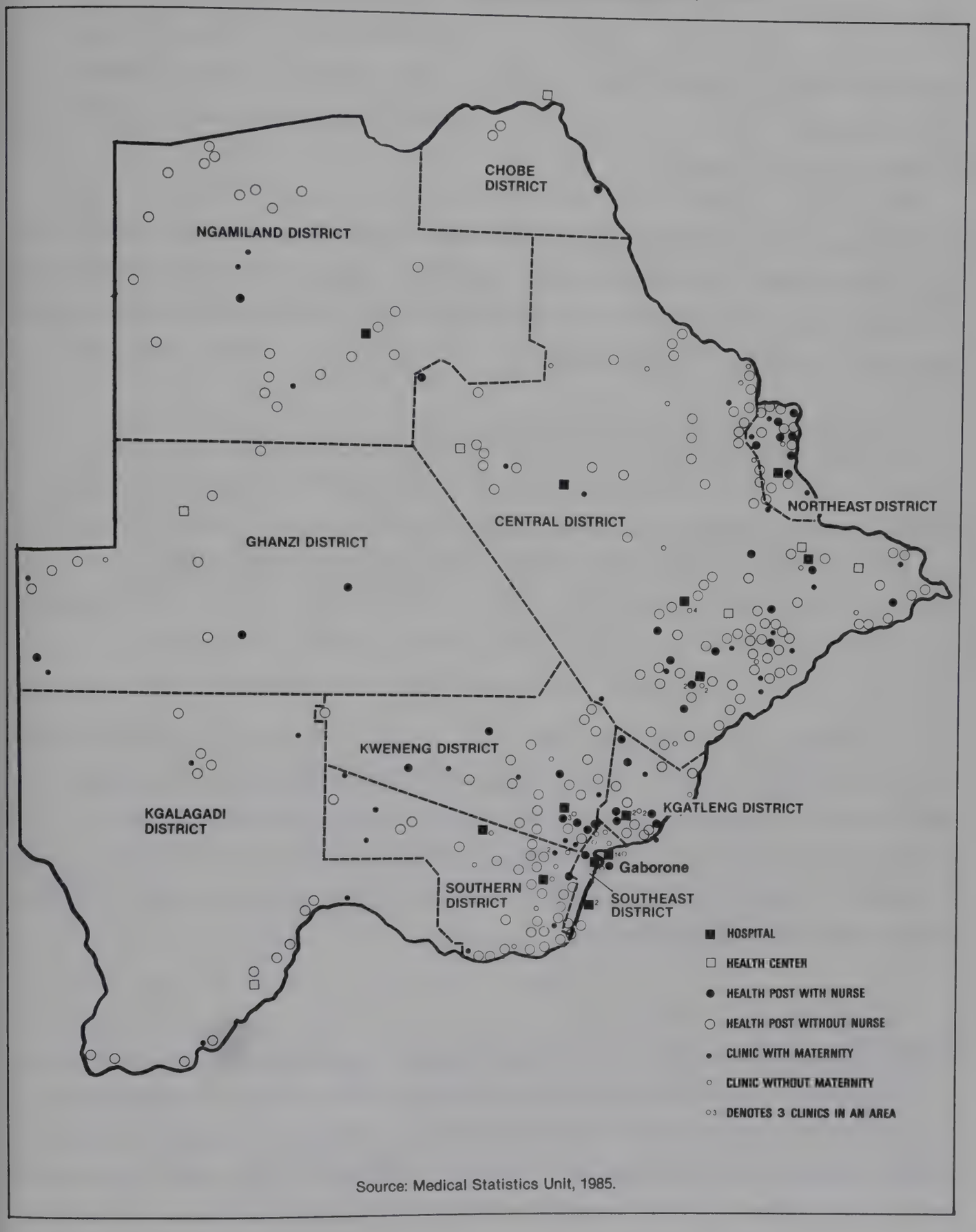
• Hospitals. Botswana has a total of fifteen hospitals including a referral hospital in Gaborone, a mental hospital in Lobatse, seven government operated hospitals in Molepolole, Lobatse, Serowe, Mahalapye,

Figure 9.1
HEALTH CARE PYRAMID



Source: Medical Statistics Unit, 1985.

Figure 9.2
HEALTH CARE FACILITIES IN BOTSWANA, 1984



Source: Medical Statistics Unit, 1985.

Francistown, Maun and Selebi-Pikwe, three mission hospitals situated in Kanye, Ramotswa and Mochudi and, lastly, three mine hospitals at Orapa, Selebi-Pikwe and Jwaneng. Estimates of the population living in the catchment areas of each of the hospitals vary from 35,000 to 100,000. These hospitals mainly provide curative health care along with some preventive health services.

Hospitals are staffed by various levels of health care personnel, e.g., specialists (at the referral hospital), medical doctors, registered nurses/midwives, enrolled nurses/midwives and other paramedicals including laboratory staff and x-ray staff.

• Health Centers. There are seven health centers in Botswana, located primarily in remote areas with a low population density. Health centers serve populations ranging from 12,000 to about 35,000. They are designed to duplicate on a small scale most of the simple curative functions provided at hospitals. Thus, all health centers, like hospitals, have maternity wards.

• Clinics. There are two types of clinics, those with maternity beds and those without maternity beds. Presently, there are 127 clinics in the country, 43 with maternity beds and 84 without maternity beds. Clinics are staffed by one to three registered nurse(s)/midwive(s), enrolled nurses, health assistants, family welfare educators and other staff members as required.

• Health Posts. There are a total of 247 health posts in Botswana. As one moves from hospitals to health posts, the services provided change in orientation from being mainly curative to being mainly preventive. Traditionally, health posts have had a family welfare educator (community health worker) as the only staff member. However, the picture is changing as enrolled nurses are increasingly being placed in the health posts

where they can assume most of the curative duties. This allows the family welfare educator to focus on preventive work.

• Health Points. Health points are reached by mobile clinics manned by clinic and health post staff.

Basically, MCH/FP services are available at all levels within the health care delivery system (hospitals, health centers, clinics, health posts, mobile stops) on a daily basis. With regard to the personnel providing services, most family planning services are offered by nurses who have been trained in MCH/FP and who are responsible for:

- prescribing oral contraceptives under the usual precautions, taking note of accepted contra-indications and side effects, which are discussed with the potential users.
- inserting intra-uterine devices after an appropriate examination and ensuring that IUDs are checked at one month and at three months after insertion, followed by six-month check-ups.
- giving injectables such as Depo Provera.
- advising women who experience side effects.

The family welfare educator, who usually is the sole staff member of the health post, is trained to assist with non-medical activities during MCH/FP Clinics. She distributes condoms and foams and resupplies pills for pill users without problems. The family welfare educator also can provide the first cycle of pills to new acceptors who must be examined by a nurse, however, before they can be resupplied.

Outside of the public sector health care delivery system, contraceptive methods also can be obtained from private doctors and pharmacies. There is, however, no private voluntary organization (e.g., a family planning association) providing family planning information or methods in Botswana.

9.2 SERVICE PROVIDERS AMONG CURRENT USERS

Respondents who were using a modern contraceptive method at the time of the interview were asked about the source from which they had obtained their method. Their responses indicate that clinics are the main providers of contraceptive services, followed by the hospitals/health centers. Table 9.1 shows that three out of every four current users get their services from clinics, while one out of every six users goes to hospital or health center for services. Comparatively small proportions of users rely on health posts (1 percent), pharmacies (2 percent) or private doctors (3 percent) for services.

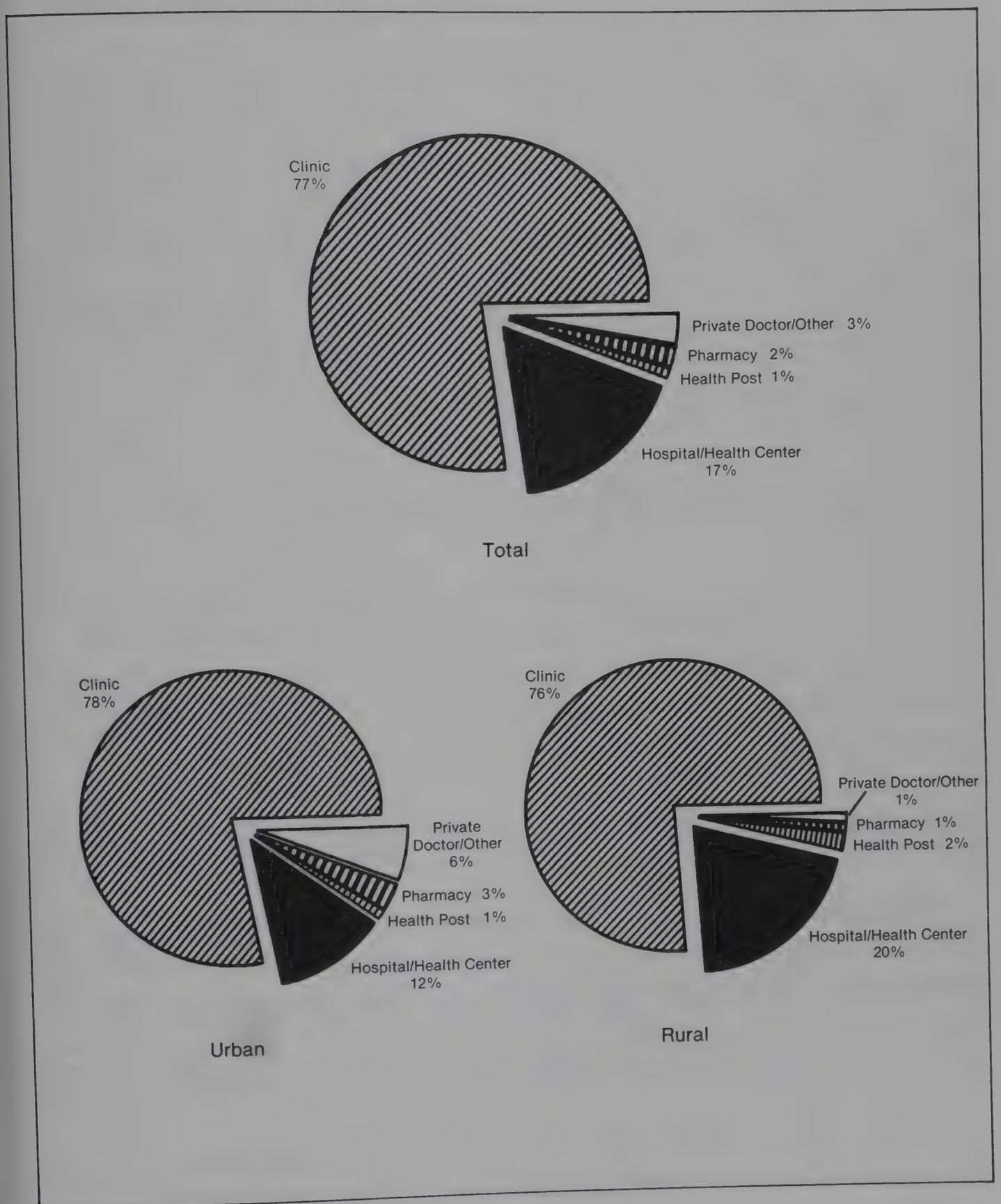
Figure 9.3 shows that current users in urban and rural areas do not differ greatly with regard to the sources where they obtain services. Clinics are the main providers of the services for both urban users (78 percent) and rural users (76 percent). Urban users are, however,

TABLE 9.1

PERCENT DISTRIBUTION OF CURRENTLY IN UNION WOMEN CURRENTLY USING A MODERN CONTRACEPTIVE METHOD BY TYPE OF SOURCE, THE METHOD USED AND AREA OF RESIDENCE, BOTSWANA, 1984

Source of Method	All Users			Pill Users			IUD Users		
	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural
Total Number	452	172	280	243	97	146	117	43	75
Total Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Clinic	76.6	78.3	75.6	84.6	82.6	85.9	76.4	79.8	74.5
Hospital/Health center	17.1	11.6	20.5	8.4	4.7	10.9	21.7	14.9	25.5
Health post	1.3	0.5	1.7	0.8	0.5	1.1	0.4	1.1	0.0
Pharmacy	1.9	3.2	1.1	2.3	4.2	1.1	0.0	0.0	0.0
Private doctors/Other	2.6	5.8	0.6	3.8	8.0	1.1	1.5	4.3	0.0
Not sure/Not stated	0.6	0.5	0.6	0.0	0.0	0.0	0.0	0.0	0.0

Figure 9.3
PERCENT DISTRIBUTION OF CURRENT USERS BY THE SOURCE FOR THEIR METHOD AND AREA OF RESIDENCE, BOTSWANA, 1984



somewhat less likely to rely on hospitals or health centers than rural users and somewhat more likely to rely on private doctors or pharmacies for their methods.

Finally, Table 9.1 also examines the distribution of pill and IUD users by source. The table shows that pill users are somewhat more likely than IUD users to be relying on clinics for their method; 85 percent of all pill users obtain their method from the clinics compared to 76 percent of IUD users. Hospitals or health posts provide services for almost all of the IUD users who do not go to the clinics (21 percent). Pill users who do not get their method at clinics are almost as likely to obtain their supplies from private doctors or pharmacies (6 percent) as hospitals or health centers (8 percent).

9.3 ACCESSIBILITY INDICATORS AMONG CURRENT USERS

Current users of modern contraceptive methods were asked questions relating to the accessibility of the source from which they obtained contraceptive services including the travel time to source, the type of transport used and the perceived convenience of the source. Their responses to these questions are summarized in Table 9.2.

9.3.1 Travel Time to Source

The majority of current users (72 percent) report that they are within 30 minutes travel time of the source from which they obtained their method. Only 14 percent say that they live more than one hour from their service provider (Table 9.2). The median travel time to a source is 20 minutes, while the mean travel time is almost 40 minutes.

Travel times to sources for rural users are considerably greater then those for urban users. Around 85 percent of urban users are within 30

TABLE 9.2

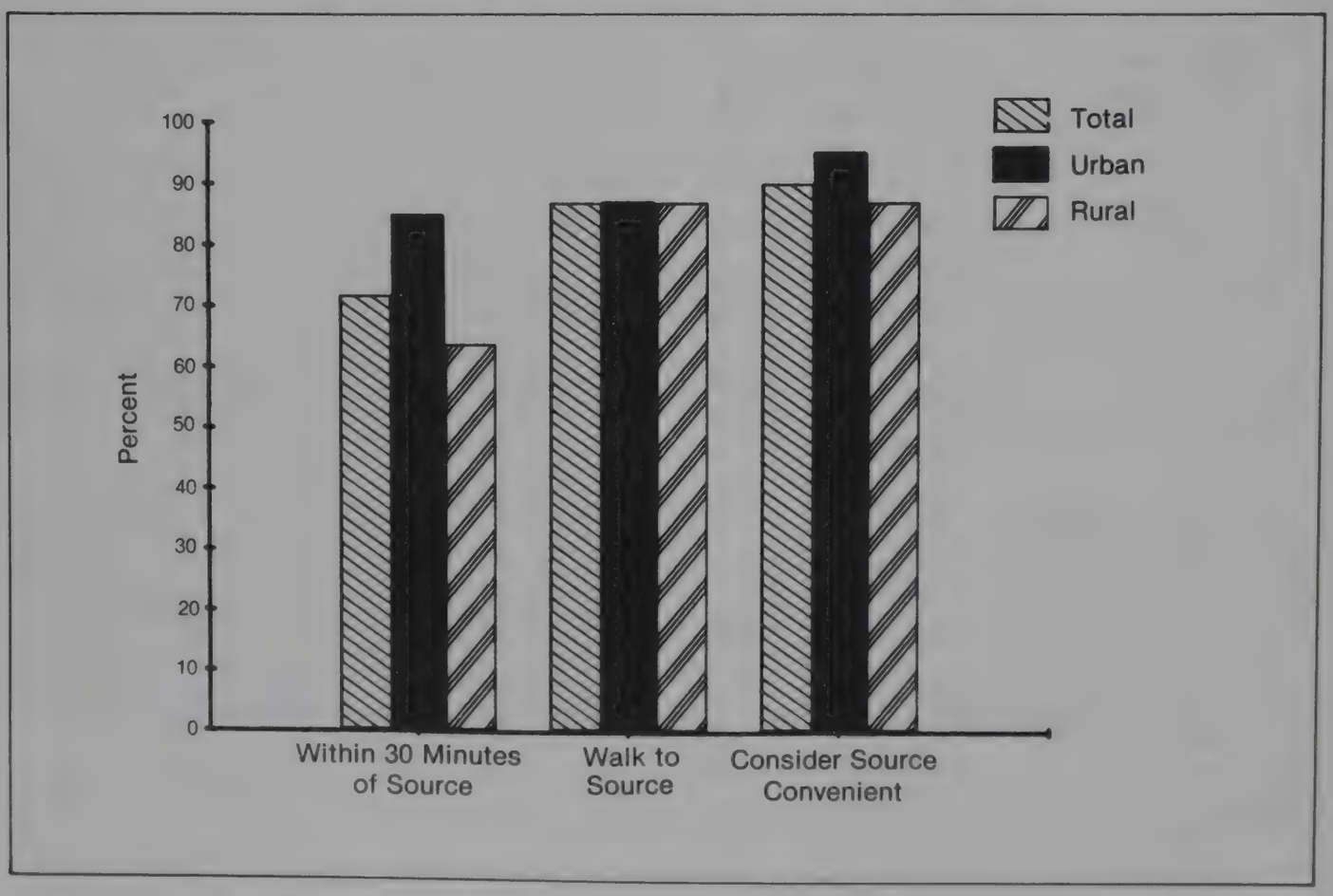
ACCESSIBILITY INDICATORS AMONG CURRENT USERS OF MODERN CONTRACEPTIVE METHODS BY THE METHOD USED AND AREA OF RESIDENCE, BOTSWANA, 1984

Accessibility Indicators	All Users			Pill Users			IUD Users		
	All	Urban	Rural	All	Urban	Rural	All	Urban	Rural
Total Number	449	171	278	243	97	146	117	43	74
Time to Source									
Total Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0-15 minutes	44.8	54.5	38.9	47.3	56.3	41.3	43.5	48.9	40.4
16-30 minutes	27.9	31.4	25.7	31.0	31.9	30.4	28.0	36.2	23.4
31-45 minutes	2.9	4.0	2.3	1.8	2.8	1.1	3.7	6.4	2.1
46-60 minutes	7.3	3.5	9.7	4.2	2.3	5.4	12.0	3.2	17.0
61 minutes or more	14.2	2.9	21.1	14.2	2.8	21.7	10.3	2.1	14.9
Not stated	2.8	3.7	2.3	1.5	3.8	0.0	2.5	3.2	2.1
Mean (minutes)	38.7	22.6	48.5	37.1	20.5	47.7	34.2	22.0	41.2
Median (minutes)	19.9	15.0	29.6	19.7	14.9	21.5	20.3	15.4	29.7
Transportation to Source									
Total Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Walk	87.0	87.2	86.9	90.3	92.0	89.1	91.3	79.8	97.9
Use transportation	13.0	12.8	13.1	9.7	8.0	10.9	8.7	20.2	2.1
Perceived Convenience of Source									
Total Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Easy to go there	90.3	95.0	87.4	90.6	96.2	87.0	95.3	94.6	95.7
Difficult to go there	9.5	4.5	12.6	9.2	3.3	13.0	4.3	4.3	4.3
Not sure	0.2	0.5	0.0	0.2	0.5	0.0	0.4	1.1	0.0

minutes travel time to the source where they obtain their method compared to only 64 percent of rural users (Figure 9.4). The median travel time to a source is 15 minutes among urban users and 30 minutes among rural users. Mean travel times are 23 and 48 minutes, respectively, among urban and rural users.

In view of the fact that the majority of pill and IUD users obtain their method from the same provider---MOH clinics, it is not surprising that there are no major differences in the travel times to sources reported by users of these methods. For example, the percentage reporting that they are more than 30 minutes travel time from a source is only somewhat greater among IUD users (26 percent) than pill users (20 percent).

Figure 9.4
COMPARISON OF ACCESSIBILITY INDICATORS FOR CURRENT USERS BY AREA OF RESIDENCE, BOTSWANA, 1984



9.3.2 Transportation to Source

The majority of current users (87 percent) walk to the source; only 13 percent use transportation when going to get their method (Figure 9.4). Overall the transportation patterns do not differ greatly by area of residence or the method used (pill vs. IUD). However, urban pill users are somewhat more likely to report walking to their source than urban IUD users (92 percent and 80 percent, respectively). This pattern is reversed in rural areas where the percentage of users reporting that they walk to their source is greater among IUD users (98 percent) than pill users (89 percent).

9.3.3 Perceived Convenience of Source

Despite the fact that most users walk to their source and that, in rural areas, one-third of all users say it takes more than 30 minutes to reach their source, only about one out of every ten current users considers

TABLE 9.3

PERCENT DISTRIBUTION OF CURRENT USERS OF MODERN CONTRACEPTIVE METHODS WHO CONSIDER IT DIFFICULT TO GET TO THEIR SOURCE BY REASON ACCESS IS DIFFICULT, BOTSWANA, 1984

Reason Access Difficult	
Total Number	43
Total Percent	100.0
Source too far	61.2
Cannot find transportation	12.2
Transportation expensive	8.5
Other	1.1
Not stated	17.0

it difficult to get to her source (Table 9.2). Table 9.3 shows that the majority of the users considering it difficult to get to their source feel that the source is too far (61 percent) while 21 percent cite transportation-related problems; either transport is too expensive or it cannot be found.

9.4 USER SATISFACTION WITH SERVICE PROVIDERS

To obtain some information with respect to the level of user satisfaction with their service provider, current users were asked about whether they had ever had any problems obtaining services at the place where they got their method and, if so, what problems they had encountered. Current users also were asked if they had any recommendations with regard to ways in which services could be improved at their source.

9.4.1 Problems in Obtaining Services

A total of 32 current users---about seven percent of all modern method users---reported that they had had problems in obtaining services from their source. The majority of these users did not specify the problems that they encountered in obtaining services. Among users who did report the problems that they had had, most complained about not being able to obtain the method from service provider (Table 9.4). Very few indicated that the staff had not been helpful or polite or that they had not been given sufficient information about methods.

9.4.2 Recommendations for Improving Services

Table 9.5 shows that around one out of three current users indicates that she is very satisfied with services at her source and does not have any recommendations as to how services can be improved. Indicating again that there may be some problems with the availability of methods, 23

TABLE 9.4

PERCENT DISTRIBUTION OF CURRENT USERS OF MODERN CONTRACEPTIVE METHODS HAVING PROBLEMS OBTAINING THEIR METHOD BY TYPE OF PROBLEM, BOTSWANA, 1984

Problems in Obtaining Services	
Total Number	32
Total Percent	100.0
Staff not helpful/polite	2.8
Methods not explained	1.4
Methods not available	41.1
Other reasons	34.0
Not stated	20.6

TABLE 9.5

PERCENT DISTRIBUTION OF CURRENT USERS OF MODERN CONTRACEPTIVE METHODS ACCORDING TO THEIR RECOMMENDATIONS FOR IMPROVING SERVICES AT THEIR SOURCE AND AREA OF RESIDENCE, BOTSWANA, 1984

Recommendations for Improving Services	Total	Urban	Rural
Total Number	449	171	278
Total Percent	100.0	100.0	100.0
Increase staff	3.9	1.9	5.1
Increase number of facilities	12.4	9.3	14.3
Provide more privacy	2.9	1.1	4.0
Teach husbands about family planning	1.4	1.9	1.1
Maintain continuous supply of methods	23.1	27.1	20.6
Other recommendations	18.2	10.6	22.9
No specific recommendation	36.6	46.6	30.3
Not stated	1.6	1.4	1.7

percent of current users recommend that a continuous supply of contraceptives should be maintained at their provider. Another 16 percent want the number of health facilities or the number of staff to be increased. Three percent mentioned the need to provide greater privacy while one percent asked that husbands be taught about family planning methods.

9.5 PREFERRED TIME TO OBTAIN SERVICES

A number of questions in the BFHS were directed toward obtaining an indication as to the preferences current users of supply methods (pill, condom, vaginal methods or injection) might have with regard to the hours of service at their source. The responses to these questions are summarized in Tables 9.6 and 9.7.

9.5.1 Preferred Day of Week

According to Table 9.6, almost all supply method users (87 percent) prefer to get their services on weekdays. Moreover, there is a marked preference, especially in rural areas, for Mondays, Tuesdays and Thursdays. The lack of interest in obtaining services on weekends probably reflects the fact that, even in "urban Botswana", women use their weekends to go to work at the lands or cattleposts.

9.5.2 Preferred Time of Day

Table 9.6 shows that more supply method users express a preference to get their services in the evening (41 percent) than in the morning (26 percent) or afternoons (30 percent). The proportion preferring evening hours is almost the same among urban and rural users (43 percent vs. 40 percent, respectively). Evening hours may be convenient for those who are formally employed because they do not have to request time off to go

TABLE 9.6

PERCENT DISTRIBUTION OF SUPPLY METHOD USERS BY PREFERRED DAY OF THE WEEK AND PREFERRED TIME OF THE DAY TO OBTAIN SERVICES AND AREA OF RESIDENCE,BOTSWANA, 1984

Preference	Total	Urban	Rural
Total Number	296	118	178
Preferred Day of Week			
Total Percent	100.0	100.0	100.0
Monday	19.7	14.3	23.2
Tuesday	19.2	15.8	21.4
Wednesday	14.6	16.6	13.4
Thursday	22.4	17.0	25.8
Friday	10.7	17.4	6.3
Saturday	1.2	0.4	1.8
Sunday	2.3	3.1	1.8
No preference	8.8	13.9	5.4
Not sure/Not stated	1.1	1.5	0.9
Preferred Time of Day			
Total Percent	100.0	100.0	100.0
Morning	26.1	19.7	30.4
Afternoon	29.8	31.7	28.6
Evening	41.4	43.2	40.2
No preference	1.9	3.5	0.9
Not sure/Not stated	0.8	2.0	0.0

to the source. It may also be convenient for the self-employed, including those engaged in farming in the rural areas, to work continuously and productively during the day, knowing that they do not have to interrupt their work to rush for services because they can get them in the evening.

9.5.3 Hours of Service Convenient

Although many supply method users prefer to get their services in the evening, almost all of the users indicate that the current hours of service at their service provider are convenient. Table 9.7 shows that only 6 percent of all supply method users feel that the hours of service are not convenient. The proportion regarding the times that their source is open as inconvenient is somewhat greater among rural users (8 percent) than urban users (4 percent).

TABLE 9.7

PERCENT DISTRIBUTION OF SUPPLY METHOD USERS BY WHETHER THE HOURS OF SERVICE AT THEIR SOURCE ARE CONVENIENT AND AREA OF RESIDENCE, BOTSWANA, 1984

Hours of Service	Total	Urban	Rural
Total Number	296	118	178
Total Percent	100.0	100.0	100.0
Convenient	92.5	94.5	91.1
Not convenient	6.3	3.9	8.0
Not sure/Not stated	1.2	1.6	0.9

9.5.4 Method Availability

Supply method users also were asked about whether their method was always available when they went for resupply and, if not, what action they took. Table 9.8 shows that, although most users find their method available at their source, about one out every ten users has problems in obtaining supplies. The percentage who indicate that their method is not always available is somewhat greater among rural users (13 percent) than urban users (6 percent).

TABLE 9.8

PERCENT OF CURRENT SUPPLY METHOD USERS BY WHETHER THEIR METHOD IS ALWAYS AVAILABLE AT THE SOURCE AND AREA OF RESIDENCE, BOTSWANA, 1984

Method Availability	Total	Urban	Rural
Total Number	298	118	178
Total Percent	100.0	100.0	100.0
Method always available	81.8	82.6	81.2
Method not always available	10.4	5.8	13.4
Not sure/Not stated	7.8	11.6	5.4

Among users who report that their method was not always available, Table 9.9 shows that 39 percent indicate that they discontinued using when they could not obtain their method, 21 percent say that they used

TABLE 9.9

PERCENT DISTRIBUTION OF SUPPLY METHOD USERS REPORTING THAT METHOD NOT AVAILABLE BY ACTION TAKEN WHEN METHOD NOT AVAILABLE, BOTSWANA, 1984

Action	
Total Number	31
Total Percent	100.0
Used another method	20.7
Obtained method elsewhere	20.0
Discontinued using	39.3
Other	10.4
Not sure/Not stated	9.6

another method and 20 percent obtained their method from another source. This demonstrates the serious consequences of running out of supplies of methods. At the same time it calls for education about use of other methods during periods when resupplies cannot be obtained.

9.6 AVAILABILITY INDICATORS FOR NONUSERS

Women who knew at least one family planning method but who were not using a modern contraceptive method were asked if they knew a source where they could obtain family planning services. Out of a total of 1,510 currently in union women in this category, 90 percent know a place where they can obtain a family planning method. Slightly more nonusers in the urban areas (94 percent) than in the rural areas (89 percent) know a source (Table 9.10).

TABLE 9.10

PERCENT OF CURRENTLY IN UNION WOMEN KNOWING AT LEAST ONE FAMILY PLANNING METHOD BUT NOT USING A MODERN METHOD BY KNOWLEDGE OF A SOURCE AND AREA OF RESIDENCE, BOTSWANA, 1984

Knowledge of a Source	Total	Urban	Rural
Total Number	1,510	333	1,177
Total Percent	100.0	100.0	100.0
Knows source	90.7	93.7	89.9
Does not know source	9.1	6.0	10.0
Not stated	0.2	0.3	0.1

9.6.1 Perceived Source

Table 9.11 shows that 85 percent of nonusers knowing a family planning service provider said that they would obtain services from MOH

TABLE 9.11

PERCENT DISTRIBUTION OF NONUSERS KNOWING A SOURCE ACCORDING TO THE SOURCE FROM WHICH THEY WOULD OBTAIN FAMILY PLANNING SERVICES AND AREA OF RESIDENCE, BOTSWANA, 1984

Perceived Source	Total	Urban	Rural
Total Number	1,370	312	1,057
Total Percent	100.0	100.0	100.0
Clinic	85.4	91.1	83.8
Hospital/Health center	4.9	1.5	5.9
Health post	9.4	7.0	10.1
Pharmacy	0.3	0.3	0.3
Private clinic/Other	0.0	0.1	0.0

clinics. Among the remaining nonusers, health posts are the most frequently cited source followed by hospitals/health centers. Patterns among among urban nonusers are generally similar to that observed for rural nonusers although urban nonusers are somewhat more likely to indicate that they would rely on clinics than are rural nonusers. Overall, as a comparison of Tables 9.1 and 9.11 indicate, users and nonusers do not differ greatly in the types of service providers they name (Figure 9.5). Nonusers were, however, more likely than users to mention the health post as a source (9 percent and 1 percent, respectively).

9.6.2 Accessibility Indicators

Table 9.12 examines the travel times to sources as well as the type of transportation that would be used reported by nonusers knowing a provider from which they could obtain family planning information or services. Overall, the majority of nonusers (67 percent) report that they are within 30 minutes travel time of a source while only 14 percent are more than one hour's travel

Figure 9.5
COMPARISON OF THE SOURCE FOR FAMILY PLANNING SERVICES REPORTED BY USERS AND NONUSERS, BOTSWANA, 1984

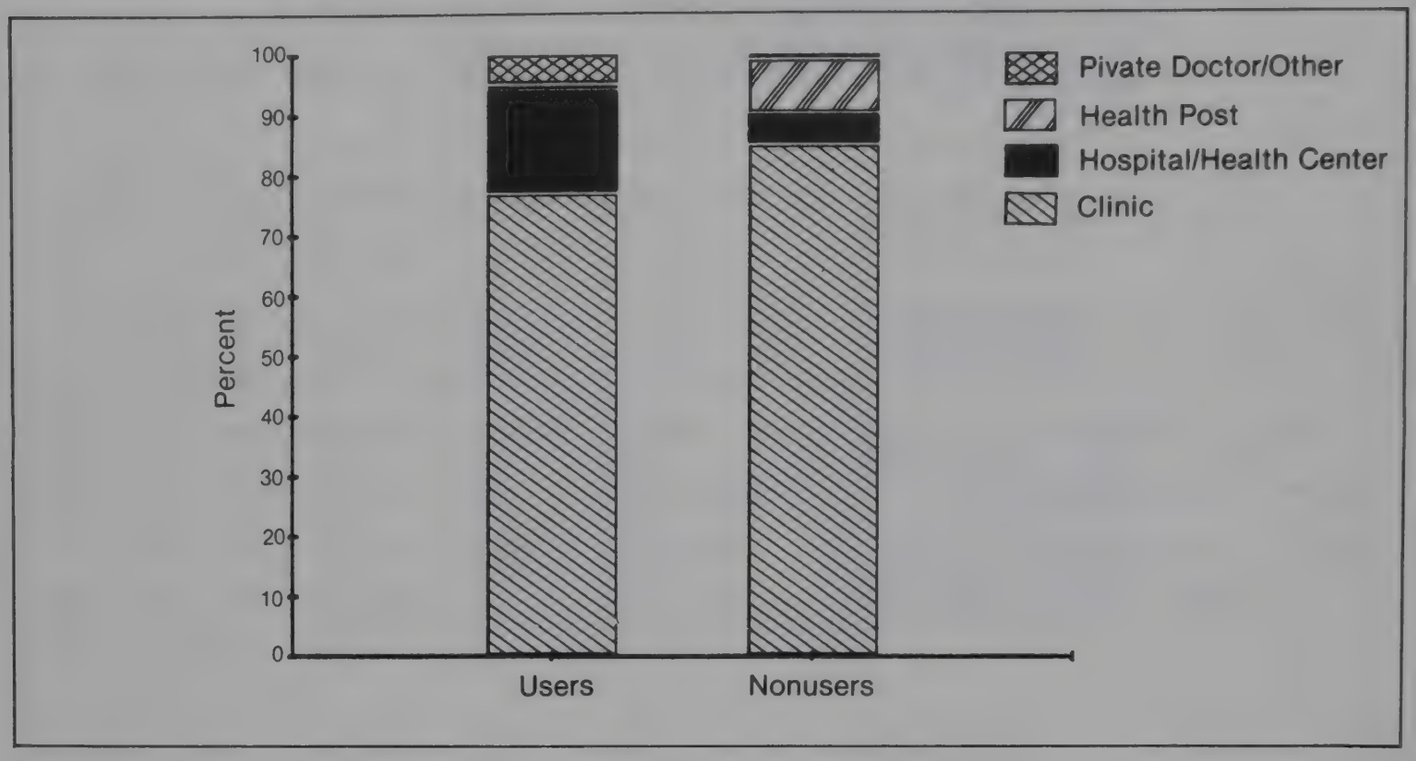


Figure 9.6
COMPARISON OF ACCESSIBILITY INDICATORS FOR CURRENT USERS AND NONUSERS, BOTSWANA, 1984

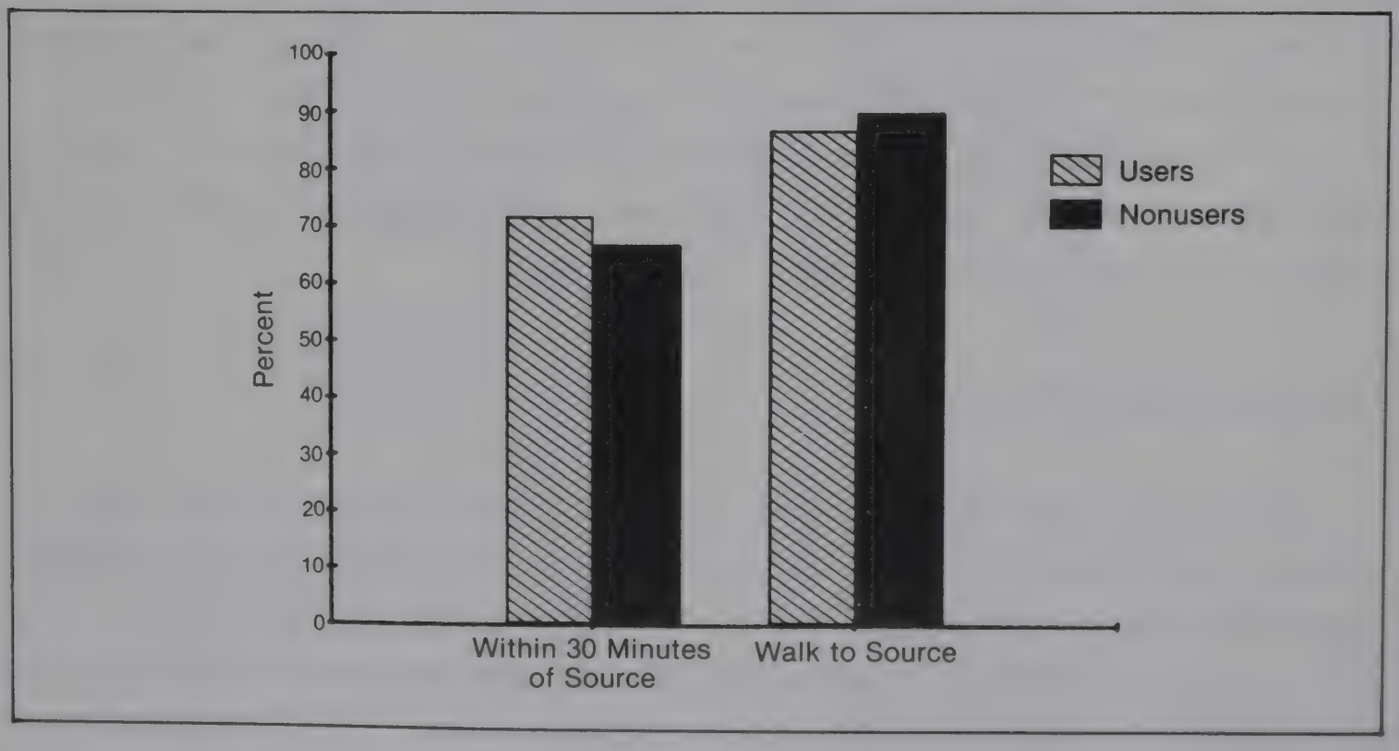


TABLE 9.12

ACCESSIBILITY INDICATORS FOR NONUSERS KNOWING A SOURCE WHERE THEY CAN OBTAIN FAMILY PLANNING SERVICES BY AREA OF RESIDENCE, BOTSWANA, 1984

Accessibility Indicators	Total	Urban	Rural
Time to Source			
Total Number	1,370	312	1,057
Total Percent	100.0	100.0	100.0
0–15 minutes	40.7	64.8	33.5
16–30 minutes	26.3	25.8	26.5
31–45 minutes	4.1	1.2	5.0
46–60 minutes	11.6	2.6	14.3
61 minutes or more	13.9	1.6	17.6
Not stated	3.4	4.1	3.2
Mean (minutes)	43.8	16.7	51.7
Median (minutes)	20.4	10.4	29.8
Transportation to Source			
Total Number	1,370	312	1,057
Total Percent	100.0	100.0	100.0
Walk	89.7	97.5	87.3
Use transportation	10.1	2.0	12.5
Not sure/Not stated	0.2	0.5	0.2

time from a service provider. Most nonusers (90 percent) indicate that they would walk to the place where they can obtain family planning services.

A comparison of the accessibility indicators for nonusers with those for users (see Table 9.2) indicates that access to services is not significantly better for users than nonusers (Figure 9.6). This finding is not

TABLE 9.13

PERCENT DISTRIBUTION OF NONUSERS KNOWING A SOURCE FOR FAMILY PLANNING SERVICES BY WHETHER THEY EVER OBTAINED FAMILY PLANNING INFORMATION OR SERVICES AT THE SOURCE AND AREA OF RESIDENCE, BOTSWANA, 1984

Ever Obtained Services/ Information at Source	Total	Urban	Rural
Total Number	1,370	312	1,057
Total Percent	100.0	100.0	100.0
Obtained information or services	60.1	61.6	59.7
Never obtained information or services	39.9	38.4	40.3

surprising in view of the similarity of the sources named by users and nonusers. It suggests that accessibility may not be a major barrier to use. In this regard, it is important to note, however, that the data for both users and nonusers show that access to contraceptive services is considerably better in urban than in rural areas.

9.6.3 Experience With Source

The majority (60 percent) of the nonusers who know a source for family planning have obtained family planning information or services at the source (Table 9.13). The percentage is nearly identical among urban and rural nonusers. Of the nonusers who ever obtained contraceptive information or services at their source, almost all (95 percent) never experienced problems in obtaining services. Again, there is no difference between urban and rural nonusers in the percentage reporting that they had no problems in obtaining services at their source.

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Appendix A

BOTSWANA FAMILY HEALTH SURVEY
List of Staff

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Appendix B

BOTSWANA FAMILY HEALTH SURVEY
Questionnaire

Family Health and Contraceptive Prevalence Survey

Part I. HOUSEHOLD INTERVIEW SCHEDULE

Questionnaire No. | | | | | | |

SECTION A. HOUSEHOLD IDENTIFICATION

Primary Interview 1 Yes 2 No

1. DISTRICT: _____

2. TOWN/VILLAGE: _____

3. PRIMARY SAMPLING UNIT NO.: _____

4. HOUSEHOLD NO.: _____

5. ADDRESS: _____

6. NAME OF HOUSEHOLD HEAD: _____

SECTION B. HOUSEHOLD VISIT RECORD

VISIT RECORD	1	2	3
DATE			
TIME OF VISIT			
INTERVIEWER'S NAME			
SUPERVISOR'S NAME			
RESULT *			

Result Codes:

1 Completed
2 Address not found
3 Address not a dwelling
4 Dwelling vacant or demolished
5 Refused
6 No adult at home
7 No eligible respondent
8 Other _____
(Specify)

OBSERVATIONS: _____

_____

_____

	FIELD EDITED BY	OFFICE EDITED BY	CODED BY	PUNCHED BY	VERIFIED BY
NAME					
SIGNATURE					
DATE					

_____

SECTION C. HOUSEHOLD COMPOSITION TABLE

Line No.	001 Enter the first and last names of every individual living in the household at the time of the survey. Begin with the head of the household.	002 What is their residential status? 1 Resident 2 Visitor	003 What is their sex? 1 Male 2 Female	004 What is their age (in completed years)?	005 Circle the line number of women aged 15-55 years.
01					01
02					02
03					03
04					04
05					05
06					06
07					07
08					08
09					09
10					10
11					11
12					12
13					13
14					14
15					15
16					16
17					17
18					18
19					19
20					20

006 Was household composition table continued on a second questionnaire? 1 Yes 2 No

Total number of persons in household

Total number of women

Total number of eligible women (15-55 years)

BOTSWANA

Family Health and Contraceptive Prevalence Survey

Part I. INDIVIDUAL INTERVIEW SCHEDULE

Questionnaire No. | | | | | |

SECTION A. INDIVIDUAL IDENTIFICATION

1. DISTRICT: _____

2. TOWN/VILLAGE: _____

3. PRIMARY SAMPLING UNIT NO.: _____

4. HOUSEHOLD NO.: _____

5. LINE NUMBER: _____

6. NAME OF RESPONDENT: _____

SECTION B. INDIVIDUAL VISIT RECORD

VISIT RECORD	1	2	3
DATE			
TIME OF VISIT			
INTERVIEWER'S NAME			
SUPERVISOR'S NAME			
RESULT *			

*Result Codes: 1 Completed 2 Partially completed
3 Deferred (note reasons)
4 Respondent not at home
6 Other _____
(Specify)

OBSERVATIONS: _____

_____

_____

_____

_____

SECTION I. BACKGROUND CHARACTERISTICS

101. It is important in this study to know your exact age. How old were you on your last birthday?

AGE _____ 98 Don't know

102. In what month and year were you born?

MONTH _____ 19_____

98 Don't know 98 Don't Know

103. AFTER EXAMINING THE RESPONSES IN 101 AND 102 CAREFULLY AND PROBING AS NEEDED, ENTER THE RESPONDENT'S AGE BELOW. ESTIMATE THE RESPONDENT'S AGE IF IT CANNOT BE DETERMINED BY PROBING

AGE _____

104. CIRCLE THE APPROPRIATE CODE FOR THE ACTION YOU TOOK IN DETERMINING THE RESPONDENT'S AGE.

1 Questions 101 and 102 both answered. Verified responses were consistent.

2 Questions 101 and 102 both answered. Responses were not consistent and age determined by probing.

3 One or both age questions were not answered initially. Age determined by probing.

4 No age response given. Age estimated because it could not be determined by probing.

IF RESPONDENT IS UNDER 15 OR OVER 49 YEARS TERMINATE THE INTERVIEW. THANK RESPONDENT FOR HER TIME AND FOLLOW INSTRUCTIONS FOR SELECTING THE NEXT RESPONDENT.

105. Have you ever attended school?

1 Yes
2 No -- (SKIP TO 107)

106. What is the highest grade you passed at school or university?

CIRCLE LEVEL AND GRADE

	LEVEL	GRADE							
1	Primary	0	1	2	3	4	5	6	7
2	Secondary		1	2	3	4	5	6	
3	University		1	2	3	4	5		

107. Can you read this sentence?

1 Yes
2 No
8 Not sure/does not know

108. Now I would like to talk with you about your occupation. Aside from doing their household work many women have jobs for which they receive payment in cash or kind.

In the past month, did you do any work for which you received payment either in cash or kind?

1 Yes
2 No

109. What is your occupation, that is, what kind of work do you do?

IF RETIRED OR UNEMPLOYED, WRITE THE MOST RECENT OCCUPATION. IF STUDENT, WRITE STUDENT, IF NEVER WORKED, WRITE NEVER WORKED.

110. What is your religious preference?

1 Spiritual/African Church Specify _____

2 Protestant Specify _____

3 Catholic

4 Other church/religion Specify _____

5 No church

SECTION II. FERTILITY

201. Now I would like to ask you some questions about your children. Have you ever had a live birth?

1 Yes
2 No (SKIP TO 207)

202. How many children have you given birth to who are living with you?

_____ Sons
_____ Daughters

203. How many children have you given birth to who are living somewhere else?

_____ Sons

_____ Daughters

204. INTERVIEWER: Sum answers to 202 and 203. Then ask: Altogether then, you have _____ living children?
(Sum)

1 Yes
2 No (CORRECT ANSWERS ABOVE)

205. Have you ever given birth to a child who later died, even if he or she only lived for a short time?

1 Yes
2 No (SKIP TO 208)

206. How many children have you given birth to who later died?

_____ Sons
_____ Daughters

AFTER ANSWERING 206, GO TO 208.

207. Have you ever been pregnant?

1 Yes
2 No (SKIP TO 231)

208. In addition to those pregnancies which ended in live births, have you had any pregnancies which ended in a stillbirth, miscarriage or abortion (including even those pregnancies which lasted only a short time)?

1 Yes
2 No (SKIP TO 210)

209. How many pregnancies have you had which ended in a stillbirth, miscarriage or abortion?

Number _____

210. Are you pregnant now?

1 Yes
2 No
8 Not sure/does not know

211. How old were you when you first became pregnant?

AGE _____

212. Were you at school when you first became pregnant?

1 Yes
2 No
3 Not sure/does not know

213. CIRCLE THE RESPONSE MARKED IN 201 BELOW AND FOLLOW THE SKIP INSTRUCTIONS.

1 Yes
2 No (SKIP TO 230)

214. When did you have your last live birth? Please give me the date

MONTH _____ 19_____
98 Don't know 98 Don't know

IF DATE NOT GIVEN PROBE:

How long ago was your last live birth?

YEARS _____ MONTHS _____

IF THE LAST LIVE BIRTH OCCURRED WITHIN THE PAST THREE YEARS (SINCE APRIL, 1982) GO TO 215; OTHERWISE SKIP TO 229.

215. Is that child still alive?

1 Yes
2 No (SKIP TO 218)

216. Are you currently breastfeeding your lastborn child?

1 Yes
2 No (SKIP TO 218)

217. From the time you woke up yesterday until the time that you woke this morning, how many times did you breastfeed your child?

_____ (Number of times during the day)
88 When child cried/on demand

AFTER ASKING 217, GO TO 221.

218. Did you ever breastfeed your last child?

1 Yes (SKIP TO 220)
2 No

219. Why not? _____

_____

AFTER ASKING 219, GO TO 221.

220. Now how long did you breastfeed your last child?

_____ MONTHS (IF ANSWER IS "UNTIL BABY DIED", WRITE AGE OF BABY AT DEATH.)

221. When you were pregnant with your last child did you ever visit a hospital, clinic or doctor for a prenatal check-up?

1 Yes
2 No

222. When you were pregnant with your last child were you ever visited in your home by a health worker?

1 Yes
2 No

223. Where did you deliver your last born child?

1 Home
2 Hospital/health center
3 Clinic
4 Other _____
(Specify)

224. Who attended that delivery?

1 Doctor
2 Nurse/midwife
3 Traditional birth attendant
4 Relative/friend
5 Other _____
(Specify)

225. After the birth of your last child, did you ever visit a doctor, hospital, clinic or health post for a postpartum check-up?

1 Yes
2 No

226. In the first week after your last birth were you visited in your home by a health worker?

1 Yes
2 No

227. Has your menstrual period returned since the birth of your last child?

1 Yes
2 No

228. Some couples abstain from sexual relations for a period following the birth of a child. Have you resumed sexual relations with your husband (partner) since the birth of your last child?

1 Yes
2 No

229. When did you have your previous live birth, the one born just before your last live birth? Please give me the date.

MONTH _____ YEAR _____

88 No other live births

PROBE: How long ago was your previous birth?

YEARS _____ MONTHS _____

230. Do you want to have children in the future (in addition to the one you are expecting)?

1 Yes --- (SKIP TO 232)
2 No . . . . . __
8 Not sure/does not know __| --- (SKIP TO 234)

231. Do you want to have children in the future?

1 Yes
2 No . . . . . __
8 Not sure/does not know | (SKIP TO 235)

232. How many (more) children do you want to have in the future?

NUMBER _____

233. If it were entirely up to you, when would you prefer to have your next (first) child?

1 Within one year (seeking pregnancy now)
2 After 1 but before 2 years
3 After 2 years
4 Whenever it happens/when God wants
5 Other _____
(Specify)
8 Not sure/does not know

| AFTER ASKING 233, GO TO 235. |

234. Before you became pregnant the last time, did you want to have more children?

1 Yes
2 No
8 Not sure/does not know

235. What is your opinion about the size of population in Botswana? Do you think that your country has too many people, just enough people or too few people?

1 Too many people
2 Just enough people
3 Too few people
8 Not sure/does not know

236. In your opinion how old should a woman be before she has her first child?

AGE (in years) _____

237. Can it harm a young woman's health if she has her first child whe she is 16 or 17 years or doesn't it affect a woman's health to ha babies at this age?

1 Can be harmful to young woman's health
2 Does not affect health
8 Not sure/does not know

238. In your opinion, how old should the youngest child be before a woman has another child?

YEARS _____ MONTHS _____

239. Do you believe that having many children can be harmful to a woman's health or it is just a rumor?

1 Can be harmful to health
2 Just a rumor
8 Not sure/does not know

SECTION III. FERTILITY REGULATION

301. As you know, there are various ways a couple can delay the next pregnancy or avoid having children if they do not want them. Do you know or have you heard of any of these family planning methods?

1 Yes
2 No (SKIP TO 303)

RECORD RESPONSES TO 302-304 IN TABLE I BELOW.

302. What family planning methods do you know?

PROBE:	Any other?

CIRCLE CODE 1 (YES) IN COLUMN [A] FOR EACH METHOD THE RESPONDENT MENTIONS.

303. | FOR EACH METHOD NOT CIRCLED IN COLUMN [A] ASK: |
|---|

Just to be sure, have you ever heard of _____(Method)_____?

CIRCLE RESPONSE IN COLUMN [B].

TABLE I

Methods	[A] Knowledge (Unprompted) 302	[B] Knowledge (Prompted) 303	[C] Ever Use 304	[D] Current Use 307
01 Pill	1 Yes	2 Yes 3 No	1 Yes 2 No	01 Yes
02 *Condom	1 Yes	2 Yes 3 No	1 Yes 2 No	02 Yes
03 Vaginal Mthds	1 Yes	2 Yes 3 No	1 Yes 2 No	03 Yes
04 Injection	1 Yes	2 Yes 3 No	1 Yes 2 No	04 Yes
05 IUD	1 Yes	2 Yes 3 No	1 Yes 2 No	05 Yes
06 Female Sterilization	1 Yes	2 Yes 3 No	1 Yes 2 No	06 Yes
07 *Male Sterilization	1 Yes	2 Yes 3 No	1 Yes 2 No	07 Yes
08 Rhythm	1 Yes	2 Yes 3 No	1 Yes 2 No	08 Yes
09 *Withdrawal	1 Yes	2 Yes 3 No	1 Yes 2 No	09 Yes
10 Abstinence	1 Yes	2 Yes 3 No	1 Yes 2 No	10 Yes
11 Other_____	1 Yes		1 Yes 2 No	11 Yes
12 Other_____	1 Yes		1 Yes 2 No	12 Yes
				90 Not Using

IF RESPONDENT DOES NOT KNOW ANY METHOD (NO "YES" CODES CIRCLED IN COLUMN [A] OR [B]), CIRCLE 90 IN COLUMN [D] AND SKIP TO SECTION V.

304. FOR EACH METHOD CIRCLED "YES" IN COLUMN [A] OR COLUMN [B] ASK:

Have you (has your spouse) ever used _____

_____?
(Specify)

CIRCLE RESPONSE IN COLUMN [C]

305. Are you or your spouse currently using some family planning method or doing something to avoid a pregnancy?

1 Yes (SKIP TO 307)
2 No

306. Have you or your spouse used any method in the last month?

1 Yes
2 No (CIRCLE CODE 90 (NOT USING) IN COLUMN [D] AND SKIP TO 315)

307. What is (was) that method?

WRITE THE NAME OF THE METHOD BELOW AND CIRCLE THE CODE FOR THAT METHOD IN COLUMN [D].

METHOD _____

IF METHOD 06 OR 07 IS CIRCLED IN COLUMN [D] OF TABLE I ABOVE, SKIP TO 312, OTHERWISE GO TO 308.

308. If it were entirely up to you, what would you prefer to use now -- your present method or some other method?

1 Present method
2 No method (SKIP TO 311)
3 Some other method

309. What method would you rather use?

01 Pill
02 Condom
03 Vaginal methods
04 Injection
05 IUD
06 Female sterilization
07 Male sterilization
08 Rhythm
09 Withdrawal
10 Abstinence
11 Other _____
(Specify)

88 None
98 Not sure/does not know (SKIP TO 311)

310. Why are you not using that method now?

_____

_____

_____

_____

311. Now I have a few questions about the family planning you are using at this time. Since you started using your present method, have you ever stopped using it for more than one month?

1 Yes PROBE: Why? _____

_____

2 No
8 Not sure/does not know

312. How long have you been using your present method (without interruption this time)?

INTERVIEWER: CHECK TO ENSURE ANSWER IS CONSISTENT WITH 214

YEARS _____ MONTHS _____

313. Have you had any problems or difficulties with your present method?

1 Yes
2 No (SKIP TO 321)

314. What problems did you have?

_____

_____

| AFTER ASKING 314, GO TO 321. |

315. | LOOK AT 210 AND MARK THE APPROPRIATE CODE BELOW THEN FOLLOW THE SKIP INSTRUCTIONS. |

1 Code 1 (yes) is circled in 210 (SKIP TO 318)

2 Code 1 (yes) is NOT circled in 210

316. What is the main reason that you are not using any family planning method to avoid or postpone a pregnancy?

_____

_____

_____

_____

317. Any other reason?

_____

_____

_____

_____

318. If you were to use a family planning method someday, what method would you choose initially?

01 Pill
02 Condom
03 Vaginal methods
04 Injection
05 IUD
06 Female sterilization
07 Male sterilization
08 Rhythm
09 Withdrawal
10 Abstinence
11 Other _____
(Specify)
88 None/would not use
98 Not sure/does not know

319. In general do you approve or disapprove of a couple using family planning?

1 Approve (SKIP TO 321)
2 Disapprove
3 It depends
8 Not sure/does not know (SKIP TO 321)

320. Why do you disapprove of a couple using family planning? Any other reason?

_____

_____

321. LOOK AT THE RESPONSES MARKED IN TABLE I FOR METHOD 01 (PILL) AND CIRCLE THE APPROPRIATE CODE BELOW. THEN FOLLOW THE SKIP INSTRUCTIONS

1 Currently using the pill (SKIP TO 324) (CODE 01 CIRCLED IN COLUMN [D].)

2 Ever used but not currently using the pill (GO TO 322) (CODE 1 (YES) CIRCLED IN COLUMN [C] AND CODE 01 NOT CIRCLED IN COLUMN [D].)

3 Knows but never used the pill (SKIP TO 324) (CODE 1 (YES) CIRCLED IN COLUMN [A] OR CODE 2 (YES) CIRCLED IN COLUMN [B] AND CODE 2 (NO) CIRCLED IN COLUMN [C].)

4 Does not know pill (SKIP TO 327) (SKIP TO 325) (CODE 3 (NO) IN COLUMN [B].)

322. You told me that you have used the pill in the past but you are not using this method now. I would like to ask you some questions about the last time that you used the pill. How long did you use the pill without stopping that time?

MONTHS _____
998 Not sure/does not know

323. What was the reason that you stopped using the pill?

_____

_____

_____

324. How often does a woman have to take the pill to keep from getting pregnant?

1 One pill every day
2 Other _____
(Specify)
8 Don't know

325. What should a woman do if she forgets to take the pill for just one day and she doesn't want to get pregnant?

1 Take two pills to catch up
2 Other _____
(Specify)
8 Does not know

326. What should a woman do if she forgets to take the pill for three or four days in a row and she doesn't want to get pregnant?

1 Start using another method
2 Consult doctor or nurse
3 Other _____
(Specify)
8 Don't know

327. LOOK AT THE RESPONSES MARKED IN TABLE I FOR METHOD 04 (INJECTION) AND CIRCLE THE APPROPRIATE CODE BELOW. THEN FOLLOW THE SKIP INSTRUCTIONS.

1 Currently using injection (SKIP TO 330)
(CODE 04 CIRCLED IN COLUMN [D].)

2 Ever used but not currently using injection (GO TO 328)
(CODE 1 (YES) CIRCLED IN COLUMN [C] AND CODE 4 NOT CIRCLED IN COLUMN [D].)

3 Knows but never used injection (SKIP TO 334)
(CODE 01 (YES) CIRCLED IN COLUMN [A] OR CODE 2 (YES) CIRCLED IN COLUMN [B] AND CODE 2 (NO) CIRCLED IN COLUMN [C].)

4 Does not know injection (SKIP TO 334)
(CODE 3 (NO) CIRCLED IN COLUMN [B].)

328. You told me that you used 'injection' in the past but you are not using it now. I would like to ask you some questions about the last time that you used injection. How long did you use injection that time without stopping?

MONTHS _____

998 Not sure/does not know

329. What was the reason that you stopped using injection?

_____

_____

_____

330. Before you began using injection did a health worker explain to you about the possible side effects of the method?

1 Yes
2 No
8 Not sure/does not know

331. Have you experienced any side effects from using injection?

1 Yes
2 No
8 Not sure/don't know

(SKIP TO 334)

332. What side effects did you have?

_____

_____

_____

_____

333. What did you do about the side effects?

1 Sought medical advice
2 Sought assistance from traditional healer
3 Stopped using method
4 Did nothing
5 Other _____
(Specify)
8 Not sure/don't know

334. LOOK AT THE RESPONSES MARKED IN TABLE I FOR METHOD 05 (IUD) AND CIRCLE THE APPROPRIATE CODE BELOW. THEN FOLLOW THE SKIP INSTRUCTIONS.

1 Currently using the IUD (SKIP TO 337)
CODE 05 CIRCLED IN COLUMN [D].)

2 Ever used but not currently using the IUD (GO TO 335)
(CODE 1 (YES) CIRCLED IN COLUMN [C] AND CODE 05 NOT CIRCLED IN COLUMN [D].)

3 Knows but never used the IUD (SKIP TO 337)
(CODE 1 (YES) IN COLUMN [A] OR CODE 2 (YES) IN COLUMN [B] AND CODE 2 (NO) CIRCLED IN COLUMN [C].)

4 Does not know IUD (SKIP TO 339)
(CODE 3 (NO) IN COULMN [B].)

335. You told me that you have used the IUD in the past but you are not using this method now. I would like to ask you some questions about the last time that you used the IUD. How long did you use the IUD that time without stopping?

MONTHS _____

998 Not sure/does not know

336. What was the reason that you stopped using the IUD?

_____

_____

_____

337. In what part of the body is the IUD placed?

1 Uterus, womb, etc.
2 Other _____
(Specify)
8 Don't know

338. How can a woman know if the IUD is correctly placed without making a specific trip to the clinic or doctor?

1 Feel thread with finger
2 Other _____
(Specify)
8 Don't know

339. LOOK AT THE RESPONSES MARKED IN TABLE I FOR METHOD 10 (ABSTINENCE) AND CIRCLE THE APPROPRIATE CODE BELOW. THEN FOLLOW THE SKIP INSTRUCTIONS.

1 Currently using abstinence (GO TO 340)
(CODE 10 CIRCLED IN COLUMN [D].)

2 Ever used but not currently using abstinence (SKIP TO 341)
(CODE 1 (YES) CIRCLED IN COLUMN [C] AND CODE 10 NOT CIRCLED IN COLUMN [D].)

3 Knows but never used abstinence (SKIP TO 343)
(CODE 1 (YES) IN COLUMN [A] OR CODE 2 (YES) IN COLUMN [B] AND CODE 2 (NO).)

4 Does not know abstinence (SKIP TO 343)
(CODE 3 CIRCLED IN COLUMN [B].)

340. For how much longer do you plan to use abstinence to avoid a pregnancy?

MONTHS _____

997 Other _____
(Specify)

998 Don't know/not sure

| AFTER ASKING 340, GO TO 343. |

341. You told me that you and your partner have used abstinence in the past but you are not using this method now. I would like to ask you some questions about the last time that you used abstinence. How long did you abstain from sexual relations that time?

MONTHS _____ 997 Other _____
(Specify)

998 Not sure/don't know

342. Why did you stop using abstinence?

_____

_____

_____

_____

343. Is it customary for women in Botswana to abstain from sexual relations following the birth of a child?

1 Yes
2 No (SKIP TO 346)

344. For how long a period should a woman traditionally abstain following the birth of a child?

MONTHS _____

997 Other _____
(Specify)

_____

_____

998 Not sure/don't know

345. In your opinion, what is the reason for this custom?

_____

_____

_____

346. Would you like to know more about family planning methods?

1 Yes (SKIP TO 401)
2 No
3 It depends
8 Not sure/does not know

(SKIP TO 401)

347. Why not?

_____

_____

_____

SECTION IV. AVAILABILITY

401. CIRCLE BELOW THE METHOD CODE MARKED IN COLUMN [D] OF TABLE I, THEN FOLLOW THE SKIP INSTRUCTIONS.

	01 Pill	
	02 Condom	
	03 Vaginal methods	
	04 Injection	(SKIP TO 403)
	05 IUD	
	06 Female sterilization	
	07 Male sterilization	
	08 Rhythm	(SKIP TO 417)
	09 Withdrawal	
	10 Abstinence	
	11 Other	
	90 Not using	

402. Who usually obtains the method that you are currently using?

1 Respondent
2 Spouse
3 Other _____
(Specify)

403. Now I would like to ask you some questions about the source of your method. From where do (did) you (your spouse) obtain your method?

1 Health post
2 Clinic
3 Health center/hospital
4 Pharmacy
5 Other _____
(Specify)
8 Not sure/does not know (SKIP TO SECTION V)

404. How much time does it take to get from your home to this place?

HOURS _____ MINUTES _____

998 Not sure/does not know

405. Would you (your partner) walk or use some means of transportati to get there?

1 Walk
2 Use transportation
8 Not sure/does not know

406. Is it difficult or easy to get there?

1 Difficult/sometimes difficult
2 Easy
8 Not sure/does not know

(SKIP TO 408)

407. Why is it difficult?

_____

_____

408. Have you ever experienced problems obtaining family planning services at this place?

1 Yes
2 No
8 Not sure/does not know

(SKIP TO 410)

409. What problems did you have?

_____

_____

410. What recommendations do you have for improving services at this place?

_____

_____

_____

_____

_____

411. CIRCLE BELOW THE CODE MARKED IN COLUMN [D] ON TABLE I, THEN FOLLOW THE SKIP INSTRUCTIONS.

01 Pill
02 Condom
03 Vaginal methods
04 Injection
05 IUD (SKIP TO SECTION V)
06 Female sterilization
07 Male sterilization
(SKIP TO SECTION V)

412. If it were up to you, would you prefer to go to obtain your family planning method in the morning, afternoon or evening?

1 Morning
2 Afternoon
3 Evening
4 No preference
8 Not sure/does not know

413. On what day of the week would you prefer to go to obtain your method?

01 Monday
02 Tuesday
03 Wednesday
04 Thursday
05 Friday
06 Saturday
07 Sunday
08 No preference/any day
98 Not sure/does not know

414. Is the source for your method open at the time you consider most convenient for you?

1 Yes
2 No
8 Not sure/does not know

415. During the past year, has your method always been available at your source when you went there to get it?

1 Yes (SKIP TO 501)
2 No
8 Not sure/does not know (SKIP TO 501)

416. What did you do when you couldn't obtain your method?

1 Used another method.

PROBE: Which method? _____

_____

2 Obtained the method from another source.

PROBE: Where? _____

_____

3 Discontinued using
4 Other _____
(Specify)

8 Not sure/does not know

AFTER ASKING 416, GO TO 501.

417. Now I would like to ask you some questions about sources for a family planning method. Do you know a place to obtain a method?

1 Yes
2 No (SKIP TO SECTION V)

418. Where?

1 Health post
2 Clinic
3 Health center/hospital
4 Pharmacy
5 Other _____
(Specify)

419. Would you walk there, or use a means of transportation?

1 Walk
2 Use transportation
3 Not sure/does not know

420. How long would it take to get there?

HOURS _____ MINUTES _____

998 Not sure/does not know

421. Have you ever obtained family planning information or services at this place?

1 Yes
2 No (SKIP TO SECTION V)

422. Did you ever have any problems obtaining family planning information or services at this place?

1 Yes
2 No
8 Not sure/does not know (SKIP TO SECTION V)

423. What problem(s) did you have?

_____

_____

_____

_____

_____

SECTION V. MARITAL STATUS

501. What is your marital status?

1 Married . . . . . (SKIP TO 504)
2 Living or visiting relationship
3 Divorced . . . . . (SKIP TO 503)
4 Separated . . . . .
5 Widowed . . . . . .
6 Single (GO TO 502)

502. Have you ever had a partner?

1 Yes
2 No (TERMINATE INTERVIEW)

503. At present, do you have a partner?

1 Yes
2 No (SKIP TO 512)

504. Is your partner living with you these days or is he away somewher

1 Living with her (SKIP TO 506)
2 Away

505. How long has he been away?

YEARS _____ MONTHS _____ (IF LESS THAN ONE MONTH, WRITE 00 MONTHS)

506. Now I would like to ask you some questions about your partner. D you think that he wants to have more children in the future?

1 Yes
2 No
8 Not sure/does not know

507. As far as you know, is it physically possible for you and your partner to have a child in the future if you want to have one?

1 Yes
2 No
8 Not sure/does not know

508. Do you think your partner approves or disapproves of family planning?

1 Approves
2 Disapproves
3 Says it depends
4 Does not care/has no opinion
8 Not sure/does not know

509. How often have you talked with your partner about family planning in the past?

1 Never
2 Once or twice
3 Three or more times

510. Did your partner ever attend school?

1 Yes
2 No . . . . . (SKIP TO 512)
8 Not sure/does not know

511. What was the highest grade he passed at school or university?

CIRCLE LEVEL AND GRADE.

LEVEL								
1	Primary	0	1	2	3	4	5	6	7
2	Secondary		1	2	3	4	5	6	
3	University		1	2	3	4	5		
98	Not sure/ does not know								

512. Now think back to the time when you first entered into a sexual union. Please give me the date you began your union.

MONTH _____ 19_____

IF NECESSARY PROBE: How old were you when you first entered a sexual union?

AGE _____

THANK THE RESPONDENT AND TERMINATE THE INTERVIEW

Appendix C

BOTSWANA FAMILY HEALTH SURVEY
Sampling Error

SAMPLING ERROR IN THE BOTSWANA FAMILY HEALTH SURVEY

The results of sample surveys are affected by two sources of error: (1) nonsampling error and (2) sampling error. Nonsampling error is due to mistakes in carrying out field activities during the survey, e.g., a failure to locate and interview the correct household or a problem in how an interviewer asks a question in the survey schedule. Nonsampling error is common in every survey. Unfortunately, it is not possible to measure the extent of nonsampling error and, thus, its effect on the results of a survey.

Sampling error provides an estimate of how the obtained results with respect to a particular variable would differ if repeated sample surveys of exactly similar design were carried out. Because sampling error, in contrast to nonsampling error, is a function of the sample design, it can be measured. Table C.1 gives an idea of the sampling error for the following variables for several domains (total population, urban, 15-24 years, 25-39 years and 40-49 years):

VARIABLE LABEL	VARIABLE	POPULATION
CEB	Number of Children Ever Born	All Women
TOTC	Number of Living Children	All Women
CPG	Percent Currently Pregnant	All Women
DESC	Percent Desiring More Children	Currently in Union Women
FSIZ	Number of Children Expected	Currently in Union Women
AGFP	Age at First Pregnancy	Ever Pregnant Women
KANY	Percent Knowing Any Contraceptive Method	All Women
KMOD	Percent Knowing Any Modern Method	All Women
KTRD	Percent Knowing Any Traditional Method	All Women
EUSE	Percent Ever Using Any Contraceptive Method	All Women
EUSM	Percent Ever Using Any Modern Method	All Women
EUST	Percent Ever Using Any Traditional Method	All Women
CUSE	Percent Currently Using Contraception	Currently in Union Women
CUSM	Percent Currently Using a Modern Method	Currently in Union Women

Brief definitions of the columns in Table C.1 follow:

R = Mean or proportion value of the estimate.

SE = Standard error of the estimate for the specific variables.

N = Unweighted number of cases upon which the estimate is based.

WN = Weighted number of cases on which the estimate is based.

DEFT = Design effect, i.e., SE/SER, a ratio between the observed standard error and the expected standard error if the design implemented had been a simple random sample.

R-2SE,, R+2SE = the 95% confidence intervals.

TABLE C.1

MEANS, STANDARD ERRORS AND CONFIDENCE LEVELS FOR SELECTED VARIABLES FOR THE TOTAL POPULATION AND SELECTED SUBGROUPS, BFHS, 1984

	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
DOMAIN: TOTAL								
CEB	3.053	0.077	3058.0	3059.0	1.491	0.025	2.900	3.206
TOTC	2.698	0.066	3064.0	3064.0	1.459	0.024	2.567	2.830
CPG	0.097	0.008	3064.0	3064.0	1.468	0.081	0.081	0.113
DESC	0.656	0.011	2435.0	2432.9	1.155	0.017	0.634	0.679
FSIZ	5.937	0.114	2421.0	2418.6	1.773	0.019	5.709	6.166
AGFP	19.326	0.109	2408.0	2487.7	1.614	0.006	19.108	19.544
KANY	0.753	0.018	3064.0	3064.0	2.276	0.024	0.718	0.789
KMOD	0.738	0.017	3064.0	3064.0	2.098	0.023	0.704	0.771
KTRD	0.507	0.028	3064.0	3064.0	3.070	0.055	0.452	0.563
EUSE	0.480	0.022	3064.0	3064.0	2.464	0.046	0.435	0.524
EUSM	0.339	0.013	3064.0	3064.0	1.507	0.038	0.314	0.365
EUST	0.281	0.028	3064.0	3064.0	3.388	0.098	0.226	0.336
CUSE	0.278	0.018	2435.0	2432.9	1.936	0.063	0.243	0.313
CUSM	0.186	0.015	2435.0	2432.9	1.914	0.081	0.155	0.216
DOMAIN: URBAN								
CEB	2.305	0.060	1588.0	721.5	1.024	0.026	2.186	2.425
TOTC	2.072	0.055	1592.0	723.3	1.059	0.026	1.962	2.181
CPG	0.083	0.010	1592.0	723.3	1.462	0.122	0.063	0.103
DESC	0.683	0.008	1267.0	575.6	0.605	0.012	0.667	0.699
FSIZ	5.087	0.115	1260.0	572.4	1.523	0.023	4.858	5.316
AGFP	19.238	0.130	1181.0	536.6	1.478	0.007	18.978	19.498
KANY	0.824	0.019	1592.0	723.3	1.951	0.023	0.787	0.861
KMOD	0.818	0.019	1592.0	723.3	1.970	0.023	0.780	0.857
KTRD	0.577	0.028	1592.0	723.3	2.279	0.049	0.521	0.634
EUSE	0.567	0.016	1592.0	723.3	1.314	0.029	0.535	0.600
EUSM	0.475	0.018	1592.0	723.3	1.418	0.037	0.439	0.510
EUST	0.278	0.019	1592.0	723.3	1.658	0.067	0.241	0.316
CUSE	0.371	0.020	1267.0	575.6	1.452	0.053	0.332	0.410
CUSM	0.298	0.018	1267.0	575.6	1.368	0.059	0.263	0.334

BOTSWANA (CONTINUED)

	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
DOMAIN: RURAL								
CEB	3.284	0.100	1470.0	2337.5	1.306	0.031	3.083	3.485
TOTC	2.892	0.085	1472.0	2340.7	1.268	0.030	2.721	3.063
CPG	0.101	0.010	1472.0	2340.7	1.249	0.097	0.082	0.121
DESC	0.648	0.014	1168.0	1857.3	1.031	0.022	0.619	0.677
FSIZ	6.201	0.146	1161.0	1846.2	1.518	0.023	5.910	6.492
AGFP	19.350	0.135	1227.0	1951.1	1.395	0.007	19.080	19.621
KANY	0.732	0.022	1472.0	2340.7	1.905	0.030	0.688	0.776
KMOD	0.713	0.021	1472.0	2340.7	1.738	0.029	0.672	0.754
KTRD	0.486	0.035	1472.0	2340.7	2.672	0.072	0.416	0.555
EUSE	0.452	0.028	1472.0	2340.7	2.184	0.063	0.396	0.509
EUSM	0.298	0.016	1472.0	2340.7	1.321	0.053	0.266	0.329
EUST	0.282	0.036	1472.0	2340.7	3.032	0.126	0.211	0.353
CUSE	0.249	0.222	1168.0	1857.3	1.741	0.088	0.205	0.293
CUSM	0.151	0.019	1168.0	1857.3	1.791	0.124	0.113	0.188
DOMAIN: 15-24 YEARS								
CEB	0.085	0.036	1336.0	1269.2	1.259	0.041	0.813	0.956
TOTC	0.818	0.031	1337.0	1270.7	1.194	0.038	0.756	0.880
CPG	0.100	0.010	1337.0	1270.7	1.198	0.099	0.080	0.119
DESC	0.824	0.014	907.0	847.1	1.081	0.017	0.796	0.851
FSIZ	4.773	0.123	903.0	843.0	1.300	0.026	4.527	5.019
AGFP	17.916	0.108	731.0	738.7	1.448	0.006	17.700	18.132
KANY	0.694	0.020	1337.0	1270.7	1.547	0.028	0.655	0.733
KMOD	0.686	0.019	1337.0	1270.7	1.530	0.028	0.647	0.725
KTRD	0.439	0.027	1337.0	1270.7	1.999	0.062	0.385	0.493
EUSE	0.372	0.021	1337.0	1270.7	1.601	0.057	0.329	0.414
EUSM	0.252	0.013	1337.0	1270.7	1.134	0.053	0.225	0.279
EUST	0.228	0.022	1337.0	1270.7	1.945	0.098	0.183	0.273
CUSE	0.287	0.021	907.0	847.1	1.423	0.075	0.244	0.329
CUSM	0.182	0.018	907.0	847.1	1.415	0.100	0.146	0.218

BOTSWANA (CONTINUED)

	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
DOMAIN: 25-39 YEARS								
CEB	3.425	0.078	1022.0	983.4	1.368	0.023	3.268	3.581
TOTC	3.102	0.072	1023.0	983.8	1.339	0.023	2.959	3.245
CPG	0.118	0.013	1023.0	983.8	1.255	0.107	0.093	0.144
DESC	0.687	0.019	906.0	871.6	1.244	0.028	0.649	0.726
FSIZ	6.175	0.184	903.0	869.1	1.768	0.030	5.807	6.542
AGFP	19.400	0.098	990.0	957.5	1.032	0.005	19.204	19.596
KANY	0.862	0.022	1023.0	983.8	2.034	0.025	0.819	0.906
KMOD	0.853	0.022	1023.0	983.8	1.962	0.025	0.810	0.897
KTRD	0.595	0.038	1023.0	983.8	2.454	0.063	0.519	0.670
EUSE	0.627	0.033	1023.0	983.8	2.192	0.053	0.561	0.694
EUSM	0.501	0.026	1023.0	983.8	1.638	0.051	0.450	0.552
EUST	0.335	0.039	1023.0	983.8	2.648	0.117	0.257	0.413
CUSE	0.341	0.029	906.0	871.6	1.907	0.086	0.282	0.400
CUSM	0.241	0.027	906.0	871.6	1.907	0.112	0.187	0.295
DOMAIN: 40-49 YEARS								
CEB	6.012	0.133	700.0	806.4	1.200	0.022	5.747	6.278
TOTC	5.160	0.123	704.0	809.4	1.244	0.024	4.915	5.405
CPG	0.067	0.011	704.0	809.4	1.123	0.158	0.046	0.088
DESC	0.420	0.020	622.0	714.2	1.028	0.048	0.379	0.461
FSIZ	7.034	0.174	615.0	706.5	1.372	0.025	6.686	7.382
AGFP	20.553	0.249	687.0	791.4	1.597	0.012	20.055	21.051
KANY	0.715	0.025	704.0	809.4	1.492	0.036	0.664	0.766
KMOD	0.678	0.023	704.0	809.4	1.316	0.034	0.631	0.724
KTRD	0.509	0.033	704.0	809.4	1.744	0.065	0.443	0.574
EUSE	0.469	0.031	704.0	809.4	1.629	0.065	0.408	0.530
EUSM	0.280	0.022	704.0	809.4	1.322	0.080	0.235	0.325
EUST	0.299	0.033	704.0	809.4	1.922	0.111	0.233	0.366
CUSE	0.191	0.015	622.0	714.2	0.949	0.078	0.161	0.220
CUSM	0.122	0.013	622.0	714.2	0.998	0.107	0.096	0.148